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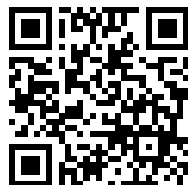
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THE JOURNAL

OF

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"In adopting our title of the *Journal of Mental Science*, published by authority of the Medico-Psychological Association, we profess that we cultivate in our pages mental science of a particular kind, namely, such mental science as appertains to medical men who are engaged in the treatment of the insane. But it has been objected that the term mental science is inapplicable, and that the term mental physiology or mental pathology, or psychology, or psychiatry (a term much affected by our German brethren), would have been more correct and appropriate; and that, moreover, we do not deal in mental science, which is properly the sphere of the aspiring metaphysical intellect. If mental science is strictly synonymous with metaphysics, these objections are certainly valid; for although we do not eschew metaphysical discussion, the aim of this JOURNAL is certainly bent upon more attainable objects than the pursuit of those recondite inquiries which have occupied the most ambitious intellects from the time of Plato to the present, with so much labour and so little result. But while we admit that metaphysics may be called one department of mental science, we maintain that mental physiology and mental pathology are also mental science under a different aspect. While metaphysics may be called speculative mental science, mental physiology and pathology, with their vast range of inquiry into insanity, education, crime, and all things which tend to preserve mental health, or to produce mental disease, are not less questions of mental science in its practical, that is in its sociological point of view. If it were not unjust to high mathematics to compare it in any way with abstruse metaphysics, it would illustrate our meaning to say that our practical mental science would fairly bear the same relation to the mental science of the metaphysicians as applied mathematics bears to the pure science. In both instances the aim of the pure science is the attainment of abstract truth; its utility, however, frequently going no further than to serve as a gymnasium for the intellect. In both instances the mixed science aims at, and, to a certain extent, attains immediate practical results of the greatest utility to the welfare of mankind; we therefore maintain that our JOURNAL is not inaptly called the *Journal of Mental Science*, although the science may only attempt to deal with sociological and medical inquiries, relating either to the preservation of the health of the mind or to the amelioration or cure of its diseases; and although not soaring to the height of abstruse metaphysics, we only aim at such metaphysical knowledge as may be available to our purposes, as the mechanician uses the formularies of mathematics. This is our view of the kind of mental science which physicians engaged in the grave responsibility of caring for the mental health of their fellow-men may, in all modesty, pretend to cultivate; and while we cannot doubt that all additions to our certain knowledge in the speculative department of the science will be great gain, the necessities of duty and of danger must ever compel us to pursue that knowledge which is to be obtained in the practical departments of science with the earnestness of real workmen. The captain of a ship would be none the worse for being well acquainted with the higher branches of astronomical science, but it is the practical part of that science as it is applicable to navigation which he is compelled to study."—*Sir J. C. Bucknill, M.D., F.R.S.*

TO THE
 ATTENTION
 OF ALL

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Part I.—Original Articles.

The Mental and Moral Effects of the South African War, 1899—1902, on the British People. By R. S. STEWART, M.D., D.P.H., Deputy Medical Superintendent, Glamorgan County Asylum.

HOW wide-spread and how varied the impression was that was created by the late war between the British Empire and the Boers of South Africa, is a matter of common knowledge. There is no means of arriving at an exact idea of the influence it exerted upon one of the belligerent parties, but, so far as the people of the British Isles are concerned, there is abundant evidence to show that it produced an immediate and very profound, though unlasting, modification of national character and conduct.

In the campaign three periods are to be distinguished. The first, which extended over three months, was that of Britain's greatest stress. The events of that period included the investment of Kimberley, Mafeking, and Ladysmith, and the adverse occurrences of Nicholson's Nek, Stormberg, Maggersfontein, Colenso, and Spion Kop. The advantage lay so far with the enemy, upon whose opposition Britain could not, with the forces then at her disposal, make any impression. In the second period, which lasted four months, the opposition of the enemy was gradually broken, and the national stress was relieved. The beleaguered towns were relieved, and the enemy's

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capitals were occupied. The succeeding two years, forming the final period, were characterised by opposition devoid of organisation.

What were the feelings engendered in us by the events of the early days of the war? No one will say that they were not tensely painful. There was, however, no note of despondency, and the whole nation manifested a spirit of determination that at all hazards the danger that threatened the Empire must be overcome. The interests of self were for the time being put aside, and no sacrifice was felt to be too great. Such a spirit as this could hardly be called into existence without producing some modification of our character and everyday conduct, and that this was so was very apparent.

What, on the other hand, were the dominant feelings of the second period, when the tension had been removed, and the forces of the Empire had begun to gain the ascendancy? Their characteristics were joyousness—a joyousness carried to the verge, and beyond the verge, of abandonment—and a lessening disposition to sacrifice the interests of self. And here, too, the existence of this spirit was reflected in an alteration of character and conduct.

Crime.

An improvement in the *morale* of the nation, as judged by a diminished criminal tendency, is a marked feature of the last three months of the year 1899, and particularly of the “dark days” of December. In England that year was all through remarkably free from crime, the total number of serious or indictable offences known to be committed showing a falling off amounting to 7·8 *per cent.* as compared with the preceding year. It is, however, in the last quarter of the year that the decrease is most pronounced, for in the first nine months it amounts only to 6·9 *per cent.*, while in the last quarter it amounts to 10, and in December alone to 17·8. This improvement, in diminishing degree, is continued through the first three quarters of 1900, the decrease being 0·4 *per cent.*, the last quarter showing an increase of 8·1, that for the whole year being 2·5.

Wales shows a percentage decrease in 1899 of 10·2 *per cent.*, followed in the succeeding year by an increase of 6·3.

In Scotland, judging by the number of apprehensions and citations in connection with all forms of serious crime, the tendency is in an opposite direction, for, though the increase for the whole year amounts to only 0·1 *per cent.*, there is an increase in the last quarter of 5·4, the first three quarters showing a diminution of 0·9. This increase is continued into 1900, in which it amounts to 7·6, that for the first three quarters being 8·3, and for the last quarter only 5·4. Still, as will be seen, there is even in Scotland a noticeable reduction in some of the more serious forms of crime.

The result in Ireland is somewhat similar to that in England, the decrease of known crimes for the whole of 1899 amounting to 8·4 *per cent.*; that for the first three quarters being 8·5, for the last quarter 7·3, and for December alone 23·5. In the following year there is a fall in the improvement of 1899, the decrease amounting to only 1·6, that for the first three quarters being 1·2, and for the last quarter 3·8; and by December a return to normal conditions is evidenced by the large comparative increase of 19·3 *per cent.*, and by the continued increase during 1901 amounting to 0·3 *per cent.*

Such in general are the immediate effects, so far as the totality of crime of a serious nature is concerned. It is interesting to note the modifications which take place in the two classes into which these offences may be divided, *viz.*, (1) those which may be described as deliberative, and which are chiefly of the nature of offences against property; and (2) those which are the outcome of impulse, the passional crimes, including offences against the person, homicidal, sexual, or suicidal.

Deliberative Crime—Offences against Property.

In England and Ireland, but not in Scotland, facts point to an elevation of the moral sense of *meum* and *tuum* as an immediate consequence of the outbreak of the war. Offences against property diminished in England in 1899 8·4 *per cent.*, the decrease in the first three quarters being only 7·8, while that for the last quarter was 10·1, and that for December was 17·1. In 1900 there was a gradual movement in the opposite direction, an increase of 1·3 *per cent.* in the first three quarters, of 9·7 in the last quarter, and of 25·8 in December, that for the whole year being 3·3.

In Wales a decrease of 11·1 is recorded in 1899, followed in 1900 by an increase of 7·5 *per cent.*

In Ireland the decrease in 1899 amounts to 8·7 *per cent.*, that for December being 23. In 1900 and 1901 there is a tendency, slight in degree, towards previously prevailing condition, small increases of 0·4 and 0·5 *per cent.* respectively occurring in these two years.

The percentage increase of this class of crime in Scotland in 1899 is 2·6, as compared with 2·5 in 1898; and in 1900 there is a further rise of 10·6.

Impulsive or Passional Crime.

In all three divisions of the kingdom crimes against the person of a homicidal nature show a distinct falling off in 1899 as compared with 1898, amounting in England and Wales to 7 *per cent.*, in Wales alone to 14·5, in Scotland to 9·4, and in Ireland to 9. The immediate nature of this result is evidenced by the facts that in England, while the percentage decrease in the first nine months is only 4·1, that for the last quarter is 18, and that for December 39; while the corresponding figures for Scotland are 7·7, 14·1, and 14·4; and for Ireland 7·2, 14·6, and 17·3. The year 1900 witnesses a gradual but steady weakening of the influence exerted by the events of the preceding quarter. In England the percentage decrease for the first three quarters is 6·4, while in the last quarter there is an increase of 3·3, giving a net decrease for the whole year of 4. In Wales the decrease is only 5·4, and in Scotland 4·7. In Ireland the decrease during the first three quarters is 14·8, but in the last quarter it diminishes to 10·7, giving for the whole year a decrease of 13·8.

The number of murders in England fell from 169 in 1898 to 142 in 1899, a decrease of 16 *per cent.*, but in 1900 these rose to 145, an increase of 2·1. Of these, the murders of newly born children, a peculiarly female crime, fell from 53 in 1898 to 33 in 1899, a decrease of 37·7 *per cent.*; but in 1900 the number recorded is 35, an increase of 6·1 *per cent.*

In 1898 9 men and 8 women committed murder and suicide. In 1899 only 6 men and not a single woman did so.

In Scotland the number of homicidal deaths fell from 20 in 1897 to 15 in 1898, or 25 *per cent.*; to 11 in 1899, or 26·6 *per cent.*; and in 1900 to 5, or 54·5 *per cent.*

These deaths in Ireland fell from 67 in 1898 to 36 in 1899, a percentage decrease of 46·3; but in 1900 the total number, 79, represents the enormous increase of 119·4 *per cent.*

A similar movement, except, again, in the case of Scotland, is observable in the prevalence of crimes of a sexual nature. These in England decreased 4·3 *per cent.* in 1899, the diminution in the first three quarters being 0·7, while that for the last quarter is 16·4, and for December 24·4. In Ireland the returns for the whole year record a decrease of 5·6 *per cent.*, that for the first three quarters being only 3·9, while that for the last quarter is 11·1, and that for December is 37·5. Apparently a contrary effect is produced in Scotland and in Wales, a percentage increase of 17·4 occurring in the former and of 4·5 in the latter in 1899. Still, the fact that in Scotland the increase for October amounts to no less than 56·2 *per cent.*, while that for the last two months of the year is only 20, and that the increase in the first three quarters of 1900 is only 9·2, shows that some influence has made itself felt similar to that which makes itself felt sooner in England and Ireland. Everywhere the effect gradually wears off as time progresses, for while in the first three quarters of 1900 the decrease is maintained in England at 7·6 *per cent.*, in Ireland at 26·3, and the increase in Scotland is the low one of 9·2, in the last quarter there is in England an increase of 1·4 *per cent.*, in Ireland the decrease drops to 8·3, and in Scotland the increase is 35·2. For the month of December, 1900, in all three divisions of the kingdom there is a great comparative increase—28·9 in England, 60 in Ireland, and 61·1 for November and December in Scotland.

The year 1899 is marked by a decrease in the number of actual suicides, amounting in England and Wales to 2·4 *per cent.*, in Wales alone to 6·2, in Scotland to 6·5, and in Ireland to 11·7. This characteristic is prolonged into 1900, so far as Scotland and Ireland are concerned, the decreases in these being respectively 9·4 and 7·8 *per cent.*; but already the opposite tendency shows itself in England and in Wales, in which increases of 1·8 and 5·5 respectively are recorded.

A similar tendency prevails as regards attempts to commit suicide. In England there is an increase of 1·4 *per cent.* in 1899, but this is entirely accounted for by the number of such offences in the first three quarters of the year, in which the

percentage increase is 3·1, the last quarter showing a diminution amounting to 4·6. In the first three quarters of 1900 the decrease amounts to 15·1, that for the last quarter is 12·1, and for December alone only 3·4. The increase of 17·8 *per cent.* in the year 1901 is in striking contrast with the decrease of 15·1 in 1900. In Wales the increase of 51·3 *per cent.* in 1899 occurred in all probability in the first three quarters, for in the succeeding year there is a decrease of 7·5, and here too the year 1901 is marked by the large increase of 20·4 *per cent.* In Ireland, likewise, 1899 shows an increase amounting to 4·7 *per cent.*, but that for the first three quarters is no less than 20·6, in striking contrast to the decrease of 34 *per cent.* in the last quarter and of 63·6 for December. While 1900 shows in its first three quarters a decrease of 45·2 *per cent.*, in the last quarter this amounts to only 33·3, and in December there is the enormous increase of 50 *per cent.* The record of 1901 is an increase of 24·2 *per cent.*

Combining the homicidal, suicidal, and sexual offences under one heading as crimes of an impulsive or passional kind, evidencing weakening of the power of self-control, the following figures show what a powerful influence the outbreak of hostilities exerted upon the character and conduct of the people of these Isles. In England the year 1899 is marked by a decrease of 3·2 *per cent.*, the first three quarters showing an increase of 1·7, while the last quarter records a decrease of 18·1, and December of 25. In 1900 the decrease in the first three quarters amounts to 10·3 *per cent.*, in the last quarter to only 2·5, and in December there is an increase of 12·5; the following year likewise being marked by an increase of 9 *per cent.* A very similar tendency occurs in Scotland, where the decrease of homicidal and sexual offences in 1899 amounts to 7·3 *per cent.*, that for the first three quarters being only 5·9, while that for the last quarter is 11·3, and for December 11·6. In 1900 there is a continued decrease of 3·7 throughout the first three quarters, but in the last quarter an increase of 0·5, and in December of 12·4; and the succeeding year still shows an increase of 0·6 *per cent.* The effect in Ireland is more and longer sustained, for here the decrease for 1899 is 6 *per cent.*, that for the first three quarters being only 2·1, while in the last quarter it is 17·5, and in December 27·8. In 1900 the decrease is 21 *per cent.*, that for the first three quarters being

23·2, for the last quarter 13·1, and for December 14 *per cent.* There is an increase of 0·5 *per cent.* in 1901.

Minor, Non-indictable Offences.

The records relating to these less serious forms of delinquency indicate the same moralising effects as in the case of the serious crimes, an effect gradually but surely disappearing as time progresses. In England the number of known offences of this kind shows an increase in 1899 of 1·5 *per cent.*, and of only 0·07 in 1900, followed in 1901 by an increase of 2·7. In Scotland, 1899 as a whole shows an increase of 7·4, but this takes place entirely in the first three quarters, in which it amounts to 10·4, the last quarter being characterised by a diminution of 1·9—a diminution which is continued through the first three quarters of 1900, in which it amounts to 1·1, in contrast with an increase of 5·6 in the last quarter, and of 4·2 in 1901. In Wales an increase of 17 *per cent.* in 1899 is followed in 1900 by a decrease of 2·6, to be succeeded in 1901 by an increase of 7 *per cent.* A percentage decrease in Ireland in 1899 of 0·3 is followed in 1900 by one of 11·3, and that by one of 10·8 in 1901.

Drunkenness, which is associated to a large extent with these minor offences, shows modifications similar to those of the class as a whole. In England there is an increase in 1899 of 5·8, a decrease in 1900 of 4·7, and an increase of 3 *per cent.* in 1901; in Wales there is an increase of 22 in 1899, practically no change in 1900, and an increase in 1901 of 13·7 *per cent.* The sobering effect is more pronounced and more prolonged in Ireland, where each of these years is characterised by a decrease—in 1899 of 14·9, in 1900 of 7·6, and in 1901 of 9·4 *per cent.* In the first three quarters of 1899 there is an increase in Scotland of 6·4 *per cent.*, followed in the succeeding quarter by a decrease of 4·3, and by one of 5·5 in the first three quarters of 1900, while in the last quarter the decrease is only 0·3. The decrease of 4·2 *per cent.* in 1900 contrasts strikingly with the increase of 3·5 in the preceding, and of 2·5 in the succeeding year.

Insanity.

Year.	Ratio, per 100,000 of population, of first admissions to asylums, etc.			
	United Kingdom.	England.	Scotland.	Ireland.
1898	51·7	49·2	61·5	59·1
1899	52·2	49·4	60·5	63·5
1900	52·6	50·2	60·8	61·9
1901	55·4	53·1	59·9	67·4
1902	60·9	57·6	62·8	76·2

There is evidence in these figures of a temporary checking of the increasing mental instability of the nation, and of another important fact, the grave effects of the reaction associated with the cessation of hostilities upon the national mental equilibrium.

Marriages.

The influence of the war makes itself felt everywhere even in such a matter as the number of marriages, an evident disinclination to matrimony being one of the striking features of the "dark days" of 1899. In England the percentage increase of 2·5 in 1898 is lowered to one of 0·27 in 1899, and this is almost entirely accounted for by the fall in the marriage rate in the last quarter from 18·5 per 1000 in 1898 to 18·3 in 1899, the rate for the first three quarters of 1899, *viz.*, 15·8, being considerably above that of 1898, *viz.*, 15·3. The year 1900 still shows a decrease of 1·8 *per cent.*, while 1901 shows an increase of only 0·7. In Scotland the percentage increase of 3·6 in 1898 is maintained through the first three quarters of 1899, when it was 3·5, but in the last quarter the tendency is in the opposite direction, a fall of 0·3 *per cent.* being recorded; and the two following years are still marked by decreases of 1·5 and 3·3 *per cent.* Very much the same movement is observable in Ireland, the last quarter of 1899 showing a

decrease of 2·9 *per cent.* as contrasted with an increase of 1·1 in 1898. There is a continued decrease during the first three quarters of 1900, amounting to 6·2 *per cent.*, but in the last quarter marriages are again in the ascendant, the percentage increase being 1·8; and in 1901 there is a further increase of 5·7 *per cent.*

Conceptions.

Even such a deep-seated instinct as that of the perpetuation of the species shows signs of modification, and it is not without significance that the annual reports of the Registrars-General for both England and Scotland for the year 1900 contain the statement that the birth-rate for that year is the lowest ever recorded. While the annual conception rate in England drops from 29·1 per 1000 in 1898 to 29 in 1899, the decrease in the last quarter of the year is from 28·8 to 28·6, and the decrease in the first three quarters of the year is from 29·2 in 1899 to 28·1 in 1900. On the other hand, the fourth quarter of 1900 shows an increase of 0·1 per 1000, and the first quarter of 1901 one of 0·9. In Scotland the total conceptions show an increase in 1899 amounting to 1·1 *per cent.*, which is entirely accounted for in the first three quarters, the numbers in the last quarter remaining practically identical in 1898 and 1899. The first three quarters of 1900 are marked by a comparative percentage increase of 1·7, while in the last quarter an increase of 1·9 is recorded. In Ireland the same tendency is to be observed. The total conceptions of 1899 show a falling off of 0·5 *per cent.*, which occurs entirely in the last quarter, in which the decrease amounts to 2·9, the first three quarters being marked by an increase of 0·2 *per cent.*; and the first quarter of 1900 again shows a great decline amounting to 6·6 *per cent.* when compared with the corresponding quarter of 1899.

Illegitimacy.

Contrary to what one finds in the case of births as a whole, the same moralising influence does not extend to illegitimacy, where the movement generally is in an opposite direction. In England, where these births had shown a decrease of 3·1 *per cent.* in 1899, the decrease in 1900 is only 0·8; in Scotland

there is an actual increase in 1900 of 0·2, as compared with a decrease of 3·8 in 1899 and of 8·8 in 1898 ; and in Ireland the proportion *per cent.* of these to total births, which fell from 2·7 in 1898 to 2·6 in 1899, shows a rise in 1900 to 2·7, and that, too, with a diminishing population.

The impressions produced by the events of the last three months of the year 1899 were such as to induce a very unmistakable change in the national characteristics—a change which is very profound, and manifests itself, in England and Ireland at least, in very immediate fashion and among all ranks of society, which affects both sexes equally, and which is in no way to be accounted for by the mere fact of the removal from our midst of the men who left us to fight in defence of the Empire's interests. The nation, as a whole, has its criminal propensities checked ; there is manifestly lessened disposition towards all forms of self-indulgence, a heightening of the respect for the lives and property of others, and a lessened disposition to shirk the troubles and responsibilities of life. The nation's mental stability is improved and its power of self-control increased. There is for the time being an unmistakable improvement in the whole national *morale*, a change the cause of which can only be found in the circumstances of the time, which were of such a nature as to constitute a menace to the safety and existence of the Empire. Gradually, however, the effect produced by these events passes away, until by the end of a year it has vanished, and there is a return to something even worse than previously prevailing conditions. We were rudely and painfully roused out of our moral trypanosomiasis ; but to all appearance, the danger being overpast, the reaction has proved, and is likely to prove in the future, productive of the gravest results.

DISCUSSION

At the General Meeting held November 18th, 1903.

The PRESIDENT said the value of so carefully prepared a statistical paper as had been presented by Dr. Stewart could not be over-estimated, and he was sure the Society fully appreciated the care, the precision, and the ability which he had displayed in working out the results that had been put forward. All felt at the time of the recent great national crisis, the dark days of December, 1899, that there would be some marks left on the general characteristics of the nation. Those marks had now been classified, as far as statistics were of value ; and they bore out in an accurate way many of the conclusions which one expected.

Dr. ROBERT JONES said Dr. Stewart was well known to some of the members as an eager and capable statistician, and he had compiled an exceedingly interesting paper. It was well known that great public questions and movements, sensational news, and popular agitations reflected themselves very much in the behaviour of the more unstable members of the population. In his own experience at Claybury recently no less than four persons were either Miss Hickman, or were commissioned by the unfortunate lady's father to look for her, or had very plausible theories to offer as to her disappearance and death. He did not like to throw any doubt upon such a paper as had just been presented, but were we yet sufficiently far removed in point of time to enable us to obtain a satisfactory perspective of the results of the South African War? We, as a nation, were called to action suddenly and rapidly, to spend our capital, to artificially inflate trade, and bring about temporary and unreal conditions, which the spending of three hundred millions could produce and have produced; and can we so soon gauge the effect of this upon the mental and moral conditions of the people at large? Dr. Stewart referred to the diminution of female crime of one class, and its increase in the matter of illegitimacy. It was a big question, and only such a student of facts and figures as Dr. Stewart was could present such statistics with any shred of authority. Whatever he said naturally commanded respect. This subject brought home to them how much mental conditions were dependent upon international, racial, social, economical, and even individual personal conditions. He (Dr. Jones) did not suggest how far removed in point of time we should be in order properly to gauge the effect of the South African War, but it was very interesting to hear quoted and compared the summaries of judicial statistics for the several years. As to some of the more recent statistics quoted, he would like to know how much the depressing weather of the past year was responsible for the diminution of suicide, referred to by Dr. Stewart as due to the war. We are informed by other statistics that the maximum suicide rate occurred during the early summer months; and the greatest incidence of insanity was always during the best weather. He only mentioned this to show that there was in some effects a plurality of causes. The *morale* of the nation, as the President remarked, received a very rude shock in the early days of the war, and we were probably suffering severely at the time from "sleeping sickness," a trouble which, as had been well said, was not confined to Uganda. Again, how much had "pro-Boerism" done to stimulate this country? Action and reaction are always equal and contrary. He encountered not an insignificant number of people who were ready to countenance the Boers at every turn, and whose one idea, when the Boer leaders came to London, was to present them with respectful addresses. He thought such tendencies greatly encouraged the spirit of Imperialism, and he thought that "pro-Boerism" had done much—more perhaps than we know or imagine—to strengthen the nation's back. He felt incapable of discussing Dr. Stewart's paper. The statistics were very extensive, and the paper, besides being valuable, certainly was based upon a large number of factors which had been ably handled by a competent authority.

Dr. HAYES NEWINGTON remarked that the Association was indebted to Dr. Stewart for his paper, not only because of its merit, but because a matter which was so much open to argument was liable to be taken up by incompetent people. And when such a subject was dealt with by a competent person one was at all events saved the danger and trouble which resulted from unskilled treatment of it, and consequent opportunity for the drawing of wrong conclusions. He did not notice that Dr. Stewart drew many conclusions; his object seemed rather to be to put certain arithmetical facts on record.

Dr. LLOYD ANDRIEZEN said the paper dealt with the mental and moral effects of the South African War. With regard to the moral effects which the war produced, he did not think the statistics of suicide and illegitimacy were adequate sources of information from which to draw conclusions. It must be remembered that war produced such profound economic and other disturbances in the country that many were driven by the rise in the price of food, by personal distress, and by a difficulty in getting labour, to crimes of one kind and another; and it would be no wonder if suicide did increase, and also sexual offences and offences against the person. If the nation were engaged upon some such war as chasing the Mad Mullah, it would be clear that any quotation from statistics would be insufficient as a basis of statements with regard to the mental and moral effects of such war upon the

nation. And a war of much greater magnitude would have little effect unless it produced economic disturbance and depression in trade. Those were the important factors which operated in producing some of the results which Dr. Stewart mentioned. But those were really insignificant items. The real point was, did a great war, such as that which took place between England and Russia, or between France and Germany, or even our war with the Boers, which lasted two and a half years and might almost be called a great war, have such a mental and moral effect in improving the temper, the tone, and the character of the nation, as Dr. Stewart seemed to imply? He (Dr. Andriezen) contended that in every war the murderous and carnivorous instincts of the human race, which had been subdued in the process of civilisation, were intensified; the criminal became more wicked, and the ordinarily peaceful man became aggressive and quarrelled with his neighbour, violence and the passions of the mob prevailed. Therefore he would be disposed to say that as regards the moral and mental conditions of the nation, the war has wrought more evil than good. War might contribute to a sobering of the minds of statesmen who had been slumbering, or of leaders who had been neglectful of their duties; but for the aggressive man the result had been to make him more aggressive and violent, and less tolerant to his peace-loving neighbours.

Dr. STEWART, in reply, thanked the members for the kind and patient hearing which they had accorded to his contribution, especially as he was well aware that statistics were a weariness to the flesh. Dr. Jones had referred to popular movements influencing the weak-minded and unstable. As a matter of fact there was only one popular movement at the time referred to; so far as Britain was concerned there was nothing else during the dark days of the last quarter of 1899, and perhaps the first three quarters of the next year. No other subject occupied the popular attention, so no other could be held to account for the figures to which he had drawn attention. The question had been asked whether we were now in a position to gauge the results of the war; he thought we were. The results for the year 1899 had come in, and they were to hand as far as 1901 and part of 1902; and there was no doubt as to the effects in those periods. December, 1899, was what might be termed the record month so far as crime was concerned. The figures showed the average daily number of crimes of a serious nature occurring in the three divisions of the country, and the figure was one which had not hitherto been reached for a long series of years. In the case of Scotland it seemed to take three months for that effect to be evident. Mention had been made of the large number of men who went out to the war, 250,000, but matters reverted to very nearly their ordinary standard while they were still out, though it was true they did not all go out together. Certainly, 250,000 men had not gone out by December, and things returned to the normal long before those 250,000 men had come back. It was not desirable to introduce politics, but methods of barbarism had been alleged against our soldiers, which was a quite unfounded charge, and it was quite unworthy to say that the soldiers were men of criminal propensities. With regard to the miserable weather, to which allusion had been made, as a fact it was always during times of stress that there were fewer suicides, fewer criminals, and fewer lunatics. The object of his paper was to point out that it was during the particular stress in the last quarter of 1899, with its upsetting effect, that there was a diminution in lunacy and crime. He had classified conceptions, marriages, and suicides as being of the nature of impulses, and their reduction as being evidence of increased morality during those dark days. By the end of December, 1901, the whole of that decrease had disappeared. In the *Times* appeared, he believed every Wednesday, a report of the number of suicides in the seventy-six large towns of England and Wales, and if Dr. Jones would refer to those he would see that no increase of suicides occurred as the result of the bad weather. One result of the bad weather, however, was the reduction of the death-rate to 13·1 per thousand. In the quarter just ended the suicides and cases of lunacy had increased. In connection with Dr. Nathan Raw's paper, the word "stress" had been mentioned as being one of the two causes of insanity, heredity being the other. He (Dr. Stewart) had been in the habit of distinguishing the kind of stress. There was chronic stress, which was undoubtedly a cause of insanity, such as might be found in agricultural counties. But there was also what he called acute stress, and the effect of that was as opposite as a cold shower-bath

differed from continual wet clothes. He held the belief that if there was one man who had invented Imperialism, he was the late President Kruger, to whom a statue should be erected in Westminster Abbey; Imperialism had grown ever since the war commenced. Dr. Hayes Newington had truly said that he (Dr. Stewart) had not drawn conclusions; he thought the best plan was to let the facts speak for themselves. He had his mind made up on the point, but he thought it better that each member should make up his own. During the war it was said there was a dislocation of economic conditions, such as absence of trade and employment. But anyone who knew the social conditions of the time would abstain from making any such statement. The unemployed were never fewer than then, and trade was never better. He thanked the members for their kind attention.

The Relation of Mental Symptoms to Bodily Disease, with special reference to their Treatment outside Lunatic Asylums. By NATHAN RAW, M.D., M.R.C.P.Lond., F.R.S.Edin., Physician Superintendent, Mill Road Infirmary, Liverpool.

MY object in reading this paper before this important Association of mental experts is twofold: first, to draw attention to the great frequency of mental symptoms developing in the course of an attack of bodily illness; and secondly, to the unsatisfactory condition of our system in this country in dealing with and treating persons suffering from *temporary mental disease*.

Now, in the first place, I want to make my position perfectly clear. I do not propose to deal with those cases of active organic insanity for which the lunatic asylum, where they will have every possible facility for recovery, is the proper place. These cases are required by law to be certified as lunatics and detained in a lunatic asylum, and very properly so; but I wish to confine my observations to those persons who, in the course of some bodily disease such as pneumonia, typhoid fever, Bright's disease, or some toxic poisoning as by alcohol, belladonna, or in the course of some septic infection, such as puerperal septicæmia, develop mental symptoms, and for whom it is necessary to provide special facilities for nursing and treatment *without* having recourse to certifying them and confining them as persons of unsound mind.

To illustrate my point. Supposing a small tradesman or

a clerk in Liverpool, in a fit of depression or despondency owing to some bereavement or financial difficulty, attempts suicide, and is for the time insane ; what is to happen to him ? His friends cannot afford to send him to a private asylum, the general hospitals will not admit insane cases, and he has to be taken to the union infirmary or to the workhouse itself as a pauper.

In a few days or weeks the symptoms have passed away, perhaps never to recur ; but in the meantime, owing to the state of the law, which says that no person may be detained in the insane wards of the workhouse more than fourteen days, he has been removed to a county asylum, certified by a magistrate and a doctor as a lunatic.

It is for cases such as this that I would like to see established in every town a reception hospital for mental diseases, provided by the municipality, where people might be admitted at once and detained for a period not exceeding six weeks ; if at the end of that time, or before if necessary, recovery had not taken place, then to be drafted to the asylums.

By this means a great saving of permanent asylum accommodation would be achieved, as at present, in my own experience, a very large number of people are sent to asylums who, if accommodated in some temporary mental hospital, would quickly recover, and thus be spared the stigma of having been certified as insane.

I know from intimate acquaintance that this stigma is real and not sentimental, and it is a fact that a workman or other employee who has been an inmate of an asylum has great difficulty in obtaining employment if the fact is known to the employer.

I am also aware, and I can heartily sympathise with the feeling, that the medical staffs of the various asylums might deprecate the treatment of mental cases otherwise than in a properly licensed lunatic asylum, as by this proposed change the recoverable cases would be diminished ; but I can hardly believe that this feeling would hold as against the benefit to a large number of people, and in the interests of the public good.

For some considerable time the lunacy problem in Lancashire has been an acute one, and although there are five county asylums averaging over 2000 beds each, it is almost

impossible to find accommodation for the lunatics, and practically all admissions are made from the workhouses—a state of matters never intended by the Legislature. Now, although insanity is, in my opinion, increasing, and consequently the asylums are every year adding more to their permanent cases, beds *must* be found for the reception of acute and new cases; and it is owing to the fact that I have had to detain and treat large numbers of mental cases during the last six years, on account of want of accommodation in the county asylums, that I have had it impressed on my mind that a large number of patients will recover in a short time without the necessity of transfer and certification to the asylum. My experience has been, I am sorry to say, considerable.

Our reception wards for insane cases attached to Mill Road Infirmary hold 150 beds, and the following table will show you the number of lunatics dealt with under Section 20 of the Lunacy Act.

MILL ROAD INFIRMARY.

Return of Lunatics for six years ending September 30th, 1903.

		Males.	Females.	Total.
Admissions . {	D.T.'s and alcoholic cases	633	370	1003
	Other cases of insanity	1482	1449	2931
	Total	2115	1819	3934
Discharges . {	To county asylums	879	1103	1982
	To non-county institutions	55	37	92
	From this infirmary	910	595	1505
	Died	240	106	346
	Total	2084	1841	3925

In Glasgow this system of providing a reception house for mental cases has been working excellently for some months, and the London County Council are applying for powers to provide four reception houses on the same lines.

With these few preliminary remarks, I will now proceed to the main points in my paper.

It would be impossible in this short paper to enter at all

fully into the details of numerous cases of which I have notes, so that I will content myself by describing in a general way the mental state of groups of cases.

In phthisis pulmonalis the mental symptoms are often very pronounced, and they play an important part in the progress and treatment of the disease. The condition generally known as the "*spes phthisica*" is not, in my experience, commonly seen, and is then seen only in those patients who are not aware of the true nature of their affliction. It is common knowledge that many patients attacked by phthisis suffer very little physical pain and inconvenience; in fact, in advanced cases, except for the cough and expectoration, they feel fairly well. It is in these cases, where the patient has no idea of the terrible nature of his disease, and where a cheerful disposition is preserved, that this abnormal hope is described. In my experience the very opposite mental state is often present, and in the later stages of phthisis, depression, fits of moodiness, with irritability of temper, and even delusions of suspicion and fear, are not uncommon. In many cases of phthisis there are intense pain and tenderness over the cervical and dorsal areas, with superficial tenderness of the scalp, the forehead, and the neck—reflected visceral pains. In some of these, hallucinations of vision are present. A patient will tell you that he has seen a dark figure like a ghost at the foot of his bed in the night, which disappears and reappears at intervals. In other cases the patient may develop hallucinations of hearing, such as "tapping on the wall," voices from the ceiling, or whispers in his ear. Delusions of suspicion and persecution are sometimes noticed, and the patient may think that he is being followed or shadowed, and that some impending calamity is upon him. I have observed a few cases in which these delusions have entirely disappeared on the arrest of the phthisis, and have not again appeared.

In cardiac disease reflected pain, chiefly over the left side of the chest, accompanied by superficial tenderness, is common. This pain is generally over the fifth to the ninth dorsal areas, with tenderness of the forehead, the temples, and the vertex of both sides. The patient may suddenly develop hallucinations of smell, and will tell you that the food is tainted and that he has a taste of poison in his mouth, and on that account will refuse all food. In other cases there is wild delirium or exalta-

tion of feelings, with a sense of great physical strength and anxiety to do hard work.

These mental states are more often present during failing compensation, and I have frequently seen them entirely pass away with improvement of the patient's physical condition. All these mental symptoms have up to the present been described and classified as hysteria and hypochondriasis, and it is quite a common thing in making one's visits to the wards for the sister to say that So-and-so has been a little hysterical during the night—perhaps screaming out through fear, or saying she has seen ghosts or visions.

I do not pretend for a moment to be able to offer any theory on the association of these curious mental states with reflected visceral pain; that they are frequently present is beyond all doubt, and it behoves the physician to be on his guard when they appear lest his patient should be treated either as hysterical or as a lunatic, instead of one who is exhibiting mental symptoms requiring sympathy and care. The conclusions of Head are of interest. Under normal conditions the functions of the viscera are outside consciousness,—that is, the heart, the lungs, the stomach, etc., carry on their physiological duties in health without our conscious knowledge. "But a complete change takes place when reflected pains of visceral origin come into existence. These sensations are produced by abnormal activity of the viscera, crowd into consciousness, and usurp the central field of attention. The patient's character appears to be altered. He will become moody, at one time unduly exalted, at another depressed without cause. Reason is displaced, and he will lose control over the expression of his emotions and of his temper." Head concludes his paper in these words:—"When the mental states mentioned above appear in consciousness they seem an intrusion from without, an inexplicable obsession that can neither be controlled nor subjected to logical analysis. All such states have since the earliest times been classified as hysteria, and I shall be satisfied if I have been successful in the relegating to their proper position a small band of symptoms included under that vast and heterogeneous group."

Heart disease.—I can only briefly mention the mental symptoms occasionally seen in heart disease associated with reflected visceral pain; but there is a definite train of mental

symptoms often associated with valvular lesions, more especially aortic, and also with aneurysms. Some writers describe cardiac insanity as a distinct variety of insanity. These mental symptoms, in my experience, are generally observed towards the close of the disease, and are very variable. The patient may develop delusions of suspicion and persecution; he thinks that others in the ward are talking about him, and that his food is being poisoned. In heart cases I have known several patients refuse all medicine on that account. In other cases they are noisy and hilarious, with ideas of grandeur and importance. Rarely they are suicidal, but several cases are recorded where the patient has thrown himself out of the window or otherwise taken his life. I have for many years been in the habit when lecturing to nurses of impressing upon them the difficulty of nursing the patients in some heart cases. They are especially irritable, suspicious, and ungrateful for all that is done for them, and they often take intense dislike to nurses and medical practitioners without any apparent cause. Acute mania sometimes develops in the course of heart disease, and I can remember two such patients being sent to the Portsmouth Asylum who rapidly recovered on the improvement of the heart. It is not my intention to speak here of palpitation, tachycardia, or other neuroses of the heart, as they do not fall within the scope of this paper.

Kidney disease.—The relation of the brain and nervous system to the kidneys is very close, and at present is little understood; but that the kidneys may be stimulated or depressed in their functions by purely nervous influences cannot be doubted. The surgeon cuts down upon a kidney or ureter for stone, but none is found; the result in some cases is a temporary suppression of urine. In other cases of suppression of urine from bladder or urethral disease, the fact of cutting down on the kidneys and incising them will restore their function. What happens we do not know. I agree with Dr. D. Savage that there is no special form of insanity associated with kidney disease, but in the later stages of chronic Bright's disease the brain seems to participate, although perhaps less than we would expect, until it is violently overcome by the uræmic poison. The patients are often found crying, and on inquiry they exhibit marked delusions of fear and suspicion; often they are delirious, restless, irritable, and show mental failure until coma

terminates the scene, preceded by convulsions. As a great clinician observed, "The idle comments foretell the ending of mortality."

It is, however, to the manifestations of uræmia that I wish especially to draw attention. Without any previous warning a patient may be seized with a violent epileptic attack, the fits being of great severity and rapidly passing into the status epilepticus.

During pregnancy, or when labour is commencing, a woman may suddenly become maniacal and may pass into a condition of eclampsia. The mental symptoms here totally overshadow the bodily ones, and it is recognised that the patient is in great danger. In both these dangerous conditions total unconsciousness is rapidly reached, and general convulsions are the rule. In the gouty contracted kidney, especially in young adults, acute mania is not uncommon, and I can remember the cases of three patients who were sent to asylums as lunatics when suffering from this condition. Commencing with restlessness, headache, and insomnia, the patient very rapidly passes into a violent state of mania, with delusions of fear and suspicion, often ending in death. In another form of uræmia the first symptom noticed is a hemiplegia or partial paralysis, with no brain lesion discoverable *post mortem* to account for it; and I have seen patients with twitchings, cramps, and hiccough who were quite unable to sleep for several days, the mind remaining quite clear to the end. In some patients the mental distress is pitiable to witness, especially in the dyspnœic form with Cheyne-Stokes respiration or the condition known as "renal asthma." When a medical man is called to a patient who is irritable, restless, and resistive, with twitchings or even convulsions, or where paralysis or coma is present, he must always have in his mind the possibilities of uræmia. It is often impossible to distinguish these cases from cerebral hæmorrhage or poisoning, and I have on quite a score of occasions seen cases *post mortem* where a supposed fracture of the base of the skull, or a supposed apoplexy, has turned out to be uræmia and nothing more. I have also had patients sent to hospital and asylum as lunatics who were in the early stages of uræmic poisoning.

Gout.—The exact etiology of gout is unknown, but among other theories the nervous one has many adherents. The

explosive neuroses and the influence of depressing circumstances, physical or mental, point strongly to the part played by the nervous system in the disease. The extremes of mental action are met with in gout—from maniacal excitement to the most profound melancholia. In acute attacks the patient may be so irritable and bad-tempered as to be unapproachable; in cases of suppressed or retrocedent gout, delirium, apoplexy, or coma may suddenly develop and terminate the disease.

Exophthalmic goitre.—In the interesting and complex disease exophthalmic goitre, the nervous and mental systems are often the most prominent. In many cases the first symptom observed is a sudden change in the mental condition. The patient becomes abnormally irritable, excitable, and fidgety; her moral nature, too, is altered, and she is untruthful, spiteful, and suspicious. Delusions of impending danger and suspicion are developed, and she has all the appearance of a melancholiac. I have seen three such cases sent to asylum who improved immensely under the influence of nerve sedatives, and were discharged quite recovered. I have also seen several cases of exophthalmic goitre where the mental symptoms have been absent and the patient has remained placid and good-tempered throughout.

Myxædema.—In myxædema a condition of mental weakness is produced by some alteration in the higher intellectual centres producing a slowness of perception and conduction. It is, however, to be borne in mind that cases of myxædema may develop acute attacks of insanity, either mania or melancholia, with delusions of suspicion and hallucinations of hearing.

Diabetes.—Although there is no known relation between diabetes and insanity, we sometimes see definite mental changes co-existing. As a rule a patient is irritable, fretful, and impatient in the earlier stages. In the later stages he becomes suspicious and distrustful of those around him, and may even develop delusions. The condition of diabetic coma is too familiar for description, and is often most difficult to diagnose until the urine reveals the disease.

Chorea.—We now come to another condition of which we know but little, *viz.*, chorea. We are familiar with its manifestations, but not with its cause. I am one of those who think that fright and sudden mental shock play a most important part in its production. I had a patient under my care two

years ago who had three distinct attacks of chorea, all caused by a black dog at home. When this dog was got rid of the patient settled down and had no further attack. The whole train of mental symptoms in chorea is one of nervous instability and fear. The patient is always in dread of something terrible going to happen, and it is only when the medical man and the nurse thoroughly get his confidence that he begins to improve. In the more serious forms of chorea, such as chorea gravidarum, convulsions and coma rapidly ensue, and death is common; whilst in a few rare cases insanity follows, and only this week I have sent a boy to the asylum who developed acute mania after an attack of chorea.

Acute infective fevers.—Amongst the numerous acute infective fevers I will only briefly refer to three, *viz.*, typhoid fever, pneumonia, and rheumatism. In typhoid fever we have two distinct phases of mental disorder—one occurring during the acute febrile stage, and the other appearing during convalescence. The nervous symptoms in some cases of typhoid fever completely overshadow all others, and the patient may rapidly pass into a condition of raving mania most difficult to treat or to control; hence the old name for the disease, “nervous fever.” The cause of this is toxæmia due to a most severe general infection, in which the nervous system participates. In other cases the patient may pass into a condition of wakefulness, with hallucinations of vision and hearing, and even delusions, which may terminate in a sleep unto death. The acute stage may pass off, and the patient during the third week may pass into a stage of profound mental prostration, or a condition of imbecility or stupidity may ensue, lasting for several weeks. The other important mental change is one of post-typhoid insanity, caused no doubt by nervous exhaustion and insufficient food, and it must be borne in mind that mania may follow ordinary starvation. In some types of typhoid fever insanity not uncommonly follows, but in my experience of a fair number of cases it always passes off, and the patient makes a good recovery. I have made a careful observation of the mental changes during an attack of acute pneumonia. In the early stages the symptoms of wild delirium, and even mania with all the symptoms of delirium tremens, are due, no doubt, to the virulence of the poison; and especially is this the case, for some reason or other, in apical pneumonia, especially the

right apex. I have seen the worst mental symptoms in cases where only a small part of the apex of the lung was attacked, and they are very fatal. The sleeplessness so often distressing to witness is due to cerebral irritation at first, and then to cerebral exhaustion. It is to be borne in mind that a patient suffering from pneumonia is liable to sudden frenzy, and may attack the nurse or patients, or may even throw himself out of a window without any warning. I have never observed insanity to follow pneumonia. Mental symptoms in rheumatic fever are extremely rare, not including those, of course, due to hyperpyrexia. I have seen one patient develop acute mania which terminated in a complete recovery after having had delusions of grandeur and importance for six weeks.

I will only briefly mention, without description, the other diseases in which mental symptoms are common.

We are all acquainted with alcohol—I mean clinically. It may in excessive doses produce all the symptoms of true insanity, as in addition to the familiar symptoms of delirium tremens, delusions of all varieties may be present, together with hallucinations of hearing and vision, constituting for the time real insanity. Many hundreds of such cases have been sent to asylums, and nearly all recover for a time. Arsenic, as we have seen recently, is capable of producing, in association with alcohol, a curious train of mental symptoms, chiefly depression and melancholia, with delusions of fear and suspicion. They pass away slowly but surely, and I have only seen two cases out of over two hundred in which permanent insanity has remained.

Time will not permit me to speak of the mental symptoms associated with uterine and sexual disorders, or the temporary insanity which sometimes follows injuries and surgical operations; but I would just like to mention the case of a young woman who was sent to the Mill Road Infirmary as a lunatic of three years' standing, who was suffering from delusional insanity, and who said that she was the Virgin Mary, and was going to give birth to another Christ, and so on. She had a large fibroid of the uterus occupying the whole abdomen and extending under the ribs. This was removed, and with it the whole of her insanity passed away, and she is now perfectly well physically and mentally.

There appears to be a very close relation indeed between

the ovaries in the female and the testicles in the male to the nervous system. A few years ago it was a common practice to remove the testicles for diseases of the prostate, especially in elderly men. The operation was followed in several cases by most disastrous results ; acute mania and delusional insanity, followed by profound melancholia, occurred in three cases under my observation. The same dire effects follow sometimes in operations on the healthy ovaries, and I think that a surgeon should hesitate before removing these organs, *when in a healthy state*, for any disease whatever.

I have seen three or four cases of raving acute mania with delusions follow the application of atropine to the eye, always in elderly people, with fortunately a good prognosis. A lady under my care developed raving delirium with hallucinations, the result of absorption from two belladonna plasters.

Now, what is the object of this somewhat disjointed paper ? There can be no doubt that physicians are now more alive to the fact that the mental symptoms arising in the course of a disease are often part and parcel of it, and require just as careful treatment as the disease itself. Too often a patient exhibiting mental symptoms is certified and sent to a lunatic asylum when a little time and patience would have cleared the whole thing up. But, it may be said, where is the alternative ? General hospitals and private houses are not equipped for the treatment of mental disease, and with regard to the hospitals it is no doubt a grave defect.

There is a great want in Liverpool in the fact that there is no reception house or hospital for those suffering from mental disease and temporary insanity, both from the point of view of the patients and their relatives, and the education of students. For instance, a man suffering from acute delirium tremens (and these cases are not uncommon in Liverpool) cannot be admitted anywhere in the city but to the workhouse hospital. These patients are the most dangerous lunatics for the time, and yet they cannot be certified as legally insane. In the large Poor-law infirmaries and workhouses, if a patient develops temporary insanity he is transferred to the mental wards, and there he remains in many instances until he is cured ; but in a general hospital or private house he is removed to a lunatic asylum, private or pauper, and is equally well cured there. But the question is, was it necessary for him to bear the stigma of

having been signed as a lunatic when he was simply suffering from temporary mental aberration the result of bodily disease? There can be no question whatever that an asylum of some sort is the best place for the patient, but he need not be certified as insane, at any rate until it is seen whether his insanity is likely to be of long duration or not. These are the cases which swell up the recovery rate of admissions to asylums, especially those suffering from alcoholic insanity; and I have always very much doubted the recovery rates from organic insanity. I would like to see established in Liverpool, preferably by the corporation, a reception house for mental diseases of all forms, where patients might be admitted in the acute stages of the disease and kept under observation for six weeks, and at the end of that time, if the symptoms have not passed off, either be removed by their friends or then certified for detention in an asylum.

After a long observation of lunatics (I have personally certified over 2500 patients to asylums), I am firmly convinced that a large number of people are certified as lunatics throughout the country who are simply suffering from temporary insanity, the result of or associated with some form of bodily disorder or toxic poisoning. These people are not really insane, and should not be associated with lunatics. They quickly recover under proper treatment, and I maintain that from every point of view it would be to the public advantage for them to be treated in a hospital for mental diseases, with expert physicians in attendance and a clinique of students to study the acute phases of mental disorder, and where the patient and his relatives might be spared the stigma of his having been detained in a public lunatic asylum as a certified lunatic.

DISCUSSION

At the General Meeting held on November 18th, 1903.

Dr. G. SAVAGE.—Mr. President and Gentlemen,—The subject which has been brought forward by Dr. Raw is one, as most of you know, which has occupied a great amount of my time and care. One feels the practical difficulties, perhaps more than he does. I may say, to begin with, that the paper has to be considered in two different aspects: first, the practical aspect, the question of patients being received, not into asylums, but into some reception houses; second, as to the forms of insanity or mental disorder that would require such admission. Let it be granted that there are reception houses required; how are we to get them? I am fully in accord with the desire that patients suffering from temporary mental disease should not be treated as, or called, in fact, lunatics or insane. If we could only discharge from the English dictionary certain words, like "lunatic" and

"asylum," we should do an enormous amount of good. (Hear, hear.) The homes, the asylums, the hospitals for the insane—whatever they are called—are admirably managed, and it would be very helpful if patients could be sent to them without the formality of certification, and could not only be admitted, but could be retained there. Everyone knows what the difficulty is. One recommends that a patient should go as a voluntary boarder, and the patient is willing to do so, but is not willing to stop there. And the consequence is that he leaves or is certified. If he goes there as a voluntary boarder and is afterwards certified, he considers that a mean advantage has been taken of him. If he comes out, harm follows to all. One feels, therefore, with Dr. Raw, that if some reception houses could be instituted, or if some asylums could be utilised so that they should be made reception houses, or, still better, if the law could be expanded so that it would be quite easy to send a patient into a good private or public asylum, or hospital where he could be definitely retained for a certain time while he is to be treated, it would be an advantage. He thought all would agree that some expansion of the law was required. In the evolution of the treatment of insanity there had been first of all the safety of the public as the great object, and the welfare of the patient greatly disregarded; the latter was kept from harming himself and society. And then there came that great movement in favour of the freedom of the patient, even to the adoption of lockless doors. Now there is a desire that there should be freedom, not of the patient, but of the doctor, and it seemed that all are now most anxious that there should be greater liberty in treating patients. One was called to see a patient when suffering from pneumonia, and one had no hesitation in retaining him for a certain time; but if that patient had no great increase of temperature, no definite delirium, and no marked bodily disease, very likely the general practitioner hesitated to have two male attendants to restrain him; and yet it was probably the best thing for that patient. He believed they were all drifting in the same direction, and when the fiscal policy was settled something in the shape of lunacy legislation might be obtained. And if with that lunacy legislation one could get a kind of injunction by which a patient was received, and retained, and properly treated, both in asylums and in certain well regulated and observed homes, great good would result. It was scarcely necessary for him to refer to the very many interesting conditions which had been spoken to by Dr. Raw, though there were one or two which he might be allowed to mention. First of all, he thought of Sir William Gull's dictum to him many years ago: "Remember that the brain is a gentleman with many servants, and withal he may be badly served by any one of them." All recognised that the brain had only one series of ways of expressing itself when it was badly nourished, and it may be badly nourished by disorder or disease of any one of the organs. With regard to the insanity associated with operations, he did not know whether attention had been specially called to the point, but his observation and experience was, that it was operations "below the belt" which gave rise to insanity; operations about the head comparatively rarely did so. He had seen scarcely any cases of insanity following the amputation of arms or legs; but when it came to the ovary, the rectum, the bladder, the prostate, he had constantly met those cases, and he did not know whether that had been explained. Dr. Raw referred to some such cases, and he (Dr. Savage) thought it of great importance to recognise that such a result might follow. He felt the subject was so large that he could do little more in summing up than to say he agreed entirely with the doctor having some expansion of liberty in the reception, treatment, and retention of patients of unsound mind. At the same time he would say that all alienists recognised more and more the importance of examining, not only a patient's senses, but every part of his body.

Dr. URQUHART said he felt very much indebted to Dr. Raw for having brought that interesting paper before the Association. When Dr. Raw went to Liverpool, now some years ago, he besought of him to do what he had now done—to give some account of the mental symptoms following on ordinary bodily diseases and disorders. There were very few men who were competent to undertake a task of that sort; and, although general physicians had been rather captious critics of the work of alienists, it would have been noticed that there were very few indeed who had done what they might in regard to the subject which Dr. Raw had brought forward on that occasion. Dr. Raw's early experience in asylum work, and his latest very great experience in the ordinary hospitals of the

country, in both Dundee and Liverpool, entitled him to be heard with the utmost respect; and he thought that members were greatly indebted to the author for coming before them with the results of so many years' work. The question of receiving houses was a very old one, and great difficulties had been most unnecessarily made about it. It must be nearly thirty years since he saw the receiving house which Dr. Norton Manning—now, unhappily, lost to them—initiated in Sydney. There was at that time, in a remote colony, the very arrangements which in England were being striven for to-day. He particularly begged the meeting to notice that that original receiving house was under the care and direction of the physician responsible for the treatment of the insane in the neighbouring asylums of the colony; and if the proposed new development was to be of any use, it must be at the hands of experts. He deprecated most heartily the idea that a general physician was competent to undertake such a task. They worked, and had claims, in the region of psychiatry; and he was sure he might say for every member of the Association that they had always welcomed the aid of the general physician, of the ophthalmic surgeon, of the gynaecologist, or anyone who would come to their help in circumstances of difficulty, and when they really required that skilled advice which they could give. But it should be remembered that alienists had experience which was of the utmost consequence to men in other fields of medicine. He represented an institution which stood a little apart from the great county hospitals of the kingdom. In dealing with the private insane they had a lead long years ago from Mr. Mould, who saw that an asylum ward was not always the best place for an insane patient, and he developed the system of separate care to an extent which probably had been unprecedented anywhere. Similarly, in following him, he (Dr. Urquhart) had seen houses set apart for the treatment of those cases; and it was only this week that he was lamenting to the Commissioners that he could not use those small houses for the reception of cases without the formal certification of the patients. That was a grave defect. If one could in some way use the temporary certificate in Scotland for a detached house belonging to an asylum, it would be of the greatest benefit to the insane, and a great step forward for the speciality. He hoped members of the Association would not lose sight of that, and that its Parliamentary Committee would represent to Parliament that more freedom should be permitted to the alienist physician, to treat certain cases apart, and in the latter's own interests. He wished to say a word about one other point. The thesis read by Dr. Raw laid stress on the physical condition of the person and the results mentally. He (Dr. Urquhart) had lately devised an intricate and lengthy system of classification in regard to mental disorders, on the Dewey system; and when he was about to submit it to Mr. Dewey he found that he had omitted reference to purely psychological phenomena. The whole classification had been directed to the underlying physical conditions, and he had quite forgotten that there were such things as imagination and intellect. It showed that one's inclinations at present were just those which Dr. Raw had represented, consideration not so much of the manifestations of mind, but of the underlying physical facts which it was of importance to know and recognise.

Dr. WIGLESWORTH said the subject of bodily diseases and insanity, which Dr. Raw had brought forward, was exceedingly interesting. He was hoping that the author might have given his views on the pathology of some of the cases to which he referred, for undoubtedly they were very interesting from that point of view, *i.e.*, as to the bearing of ordinary cases of insanity on obvious bodily disease. One of the most illuminating papers he had seen published on the subject was one by Dr. Head, which Dr. Raw alluded to, in *Brain*. Dr. Head approached the subject in a thoroughly philosophic way, and in a manner which had not been previously attempted in this country. He (Dr. Wiglesworth) did not think there were so many cases of insanity due to obvious bodily disease, such as pneumonia, uræmia, and so on, as Dr. Raw made out. They were not frequently seen in asylums; he supposed Dr. Raw cured them all himself, and did not send them on to the asylums. It was not necessary to send on such cases to institutions, but he thought they were in a minority. He thought the most suitable cases for reception houses were acute alcoholic subjects. He believed Dr. Raw stated that 1000 of his cases were alcoholic, and as he cured or sent out recovered 1500 out of the 3900, he had no doubt that the majority of those 1500 consisted of alcoholic cases. It was

unnecessary to send acute alcoholics to asylums. He did not follow Dr. Raw as to the cases he referred to not being insane. If one took a case of delusions of persecution, one often found acute paranoic states resulting from drink, and they were sent to asylums, and quite properly so, and they frequently got well after a while. Such cases were as much insane as any case of paranoia which had developed independently of alcohol, and they should be so considered. With regard to the treatment to be adopted for such cases, although he agreed with the idea of a small hospital for the treatment of acute cases, he thought a town was the wrong place for such hospital. It should be in the country, at least a few miles from any town. If one took the instance of a case of acute melancholia who attempted suicide, he (Dr. Wigglesworth) believed he would not get well so readily in the wards of a reception house in the middle of a large town, exposed to the noise of its racket and wear and tear. The mere transfer of the patient into the country, with its peaceful rural environment, was of enormous benefit. He expressed himself against patients being kept for any length of time in any reception house in a large town, and he thought the period of six weeks mentioned in the paper was rather too long. He thought that, as a rule, if the case did not get well in a fortnight it should be transferred to an asylum in the country. He thought some of the cases which ultimately came to asylums remained permanently insane as a result of not coming soon enough. That was his experience, and if cases were kept back in reception houses or workhouse wards—though they were known to be well looked after in Mill Road Infirmary, of which Dr. Raw was the head—or in any institution, and they did not recover, the burden of lunacy thrown upon the country would be far greater if the patients remained permanently insane than if they had been sent straight away to an asylum in the first instance and got well. His experience was not the same as Dr. Raw's on the question of the curability of post-febrile insanity. He had seen many cases in which insanity following fevers such as typhoid did not get well, but the subjects remained permanently insane. The view he strongly held was that, in the first place, if reception houses were provided for cases such as had been described, then the period during which the patients should be detained should not be more than a fortnight, after which time, if they did not get well, they should be handed on to an asylum. And he would much prefer that the reception house should be situated in the country.

Dr. ROBERT JONES said that at the November meetings of the Association, usually some physician of large practical experience read a paper. A contribution had been submitted on the present occasion from one who had extensive general experience of mental cases before they were received into asylums, and who, in addition, was a member of our own Association; and we might have gone much further for a paper and fared worse. Dr. Raw's experience related to cases which the alienist physician did not see, inasmuch that the insanity was temporary, and it depended upon transient causes. His observations in this respect, therefore, were most valuable. They were very much to the point, and very instructive. The paper was essentially practical, and had been already amplified by the remarks of Dr. Savage and Dr. Wigglesworth. With regard to reception houses, as he (Dr. Jones) was serving under the London County Council, who had a scheme before Parliament in regard to these, he thought it would be in better taste for him to abstain from offering any remarks in the nature of criticism. He might state, however, as the matter was specially referred to by Dr. Wigglesworth, that the time fixed for detention by the London County Council was a limit of six weeks, but this could be extended more or less indefinitely by further periods, with the consent of the Lunacy Commissioners. The meeting had heard Dr. Wigglesworth's views on that point. He (Dr. Jones) thought a case had been fully made out by Dr. Raw, as to the value of the reception house, so as to avoid the stigma of detention in asylums of transient cases, or those in the incipient stage of insanity; but he agreed with Dr. Wigglesworth that such houses would be better placed away from the heart of a city, and where there was plenty of fresh air and opportunity of outdoor exercise and recreation. The Assyrians had full knowledge of the value of outdoor treatment in cases of acute insanity, as was exemplified in the case of Nebuchadnezzar, and he thought that was a lesson which municipal authorities might very well take to heart from an ancient and historic race. Dr. Raw had referred to 4000 cases of insanity admitted under his care, out of whom 1000 were

discharged recovered before the expiration of the statutory limit of detention. He did not think that for cases of alcoholic insanity—cases which formed the majority of those discharged by Dr. Raw—an asylum was the proper place into which to send them, although, doubtless, the discipline and order of a well-regulated asylum could not but be of benefit to them. The prospect of future sobriety was probably diminished by the stigma of the asylum, and the material prosperity of a person who had been confined in an asylum for insanity when he was only a drunkard was very much reduced. With regard to the law, elasticity was wanted in the treatment; of private patients, more especially those suffering from incipient insanity. Could anything be more monstrous than the fact that when a private patient was sent for treatment into "single care," into the house of a medical man—presumably fully experienced in the treatment—the law forbade that man to be the patient's own medical attendant? and in consequence he had to be professionally attended by some other person. With regard to the physical accompaniment of mental disease, Dr. Raw referred to cardiac cases, he (Dr. Jones) had an instructive case at the present time under his care—one of aneurysm. The man was formerly at St. Bartholomew's Hospital under special treatment, and for a considerable time; but he became unmanageable and had to be certified, and removed to an asylum. At times this man was extremely irritable and very suspicious; he had smashed mirrors and windows. He took a sudden dislike to doctors and nurses, had threatened to kill somebody, and was a source of very considerable anxiety at Claybury. At other times, however, this man was extremely agreeable, sensible, and essentially tractable. No doubt his mental condition was closely associated with his physical, as referred to by Dr. Raw, and he corroborated fully Dr. Raw's views as to the special form of insanity which was likely to be associated with cardiac cases. They were essentially impulsive and unstable. He (Dr. Jones) had seen very few cases of renal disease associated with insanity. The urine of every patient at Claybury was examined on admission, and it was exceptional to find that it contained albumen. He thought the question of urotoxicity was not yet worked out, though American physicians had done more at it than we had. With regard to pneumonia, Dr. Gee, at St. Bartholomew's, used to insist upon the mental symptoms in association with apical pneumonia. He (Dr. Jones) had, not once nor twice, but several times, had patients sent into Claybury Asylum suffering from the delirium of typhoid fever, of pneumonia, and of scarlet fever. One of his late colleagues, who was present, could bear him out in that. He mentioned these cases to show how cordially he agreed with Dr. Raw, that some intermediate place between the home and the asylum was desirable, where such patients as he had referred to could be received and treated, and who, when thus treated, would be free from the stigma of having been the inmates of lunatic asylums. At the same time he fully believed that the treatment of these temporarily delirious persons should be in the hands of asylum physicians, and not obstetricians, general physicians, or neurologists. He had seen very few cases of rheumatism or of chorea associated with insanity. The most notable instance of the association of mental and physical states of this kind which he had seen was one to which he referred before at the Obstetrical Society. It was a case of pregnancy in a single girl. She was admitted pregnant, with left hemichorea. She got perfectly well after the child was born. She went out, but at a later date was admitted again in a state of pregnancy, and with hemichorea on the opposite side. She got perfectly well again and was sent out. She was then unmarried. Subsequently she was reported to have married the man to whom she was attached, and he (Dr. Jones) had not heard of her since; presumably the marriage terminated her visitations of mental distress. He quoted this as a definite case of the association of mental and bodily conditions, but, at the same time, a perfectly legitimate case for admission into an asylum. With regard to toxæmia, Dr. Raw had not referred to insanity produced by morphia, cocaine, or chloroform. He (Dr. Jones) had seen cases in each category, and it was difficult to say that they were not fit cases for an asylum. Dr. Savage had referred to the effect of operations "below the belt;" that was put very epigrammatically, but he (Dr. Jones) had seen at Claybury several cases of insanity which had followed operations above that region, and the extraction of a tooth was one! The Committee of Claybury Asylum discharged a man only a little time ago who attributed his insanity—and so did his friends—to the extraction of a wisdom-tooth, a fact

which brings up another point, *vis.*, the actual cause of insanity. Dr. Mercier, more than anyone else, has insisted upon the fact that insanity was always the product of two factors—stress and heredity. The less the heredity the greater the stress required to cause a mental breakdown; on the other hand, the worse the hereditary history, the less would be the stress necessary to reach the breaking-point. He thought that Dr. Raw had given them an extremely interesting and instructive paper.

Dr. ANDRIEZEN said he was pleased to have had an opportunity of hearing the paper by Dr. Raw, because it contained a number of scattered facts brought together into a coherent whole. He would have been glad if Dr. Raw had made an effort to put the facts into the form of a classification into groups, as he thought that by some scientific grouping of the facts one might be able to get a clearer comprehension of the etiology and pathology, and so on. Dr. Raw did not refer to rickets, but he (Dr. Andriezen) had observed that in some infants gastro-intestinal trouble produced mental enfeeblement, and in others rickets, showing that the toxic agency in one child was able to produce a disturbance of the osteogenetic process and in another child a disturbance of the cerebral processes. Clearly the two conditions, so-called mental and bodily, were not really in contrast at all; it was purely metaphysical to speak of disease of the mind in contrast to disease of the body. He thought it was time scientific men dropped such metaphysical distinctions and adhered to clinical facts. With regard to chorea, he agreed with Dr. Raw that fright or similar emotional disturbances might be a cause. But there was no doubt that in choreic children one found a distinctly bad heredity; and chorea was very often a febrile affection. With a small amount of fever the child was irritable and restless. There were experienced clinicians apart from the alienists who recognised that chorea was a febrile neurosis. And, therefore, with the mental enfeeblement of rickets there should be included those cases of mental disturbance or enfeeblement which were due to infectious or micro-parasitic conditions. To the same category belonged the various deliria which the author had mentioned—scarlet fever, influenza, cerebro-spinal meningitis,—and these could be classified together in one group. The second large group included those forms of mental disorder which might follow alcoholism or other form of toxæmia, to which Dr. Jones and others had alluded. Those included morphia and other drugs, and should be called toxic, as distinguished from the infective and febrile conditions, which belonged to a totally different class. There was a third class, which included those insanities due to a diathetic condition. Neither of the two previous etiological factors covered this third group in which there was some permanent disorder of bodily metabolism of a somewhat marked character, such as occurred in cretinism, or acromegaly, or diabetes, or myxœdema, or exophthalmic goitre. Those diseases had a somewhat curious community with one another. There were relationships of importance between exophthalmic goitre and disease of the pituitary body, and some resemblance between these and the other diseases of the diathetic class. They should be recognised as chronic disturbance of bodily metabolism, not due to infective processes, but due to some disorder of an important viscus or organ of the body essential to normal metabolism. Finally, with regard to those insanities which might be produced as the result of a definite disorder of some viscus, such as the stomach or ovary, he thought one must recognise that there was an hereditary tendency of a peculiar kind in patients of that sort. He wished to mention one instance to illustrate what he meant. A young man who had suffered severely from constipation, and had been alarmed by quacks as to his condition, got the idea into his head that the fecal lumps in his intestine were being worked upon by worms. From that point a whole host of delusions started. He imagined that the worms disseminated themselves through his body and into his brain, poisoning him in various ways; and the symptoms included a system of delusions that the spleen and the soul acted as the saviour of his life, taking the part of scavengers, and that but for their labours he would have been dead long ago. He was put through a course of hypnotic treatment, as the result of which those delusions were gradually dispelled. The delusions remained for a long time, and it was only after long and persistent treatment that the patient recovered. On inquiring into his family history, it was found that there was a strong neurotic inheritance. He thought those cases of hypochondriasis which one saw, and those which passed beyond that

stage, were clearly those in which the visceral disease was not the sole cause of the disorder, but in which there was a bad neurotic heredity which accounted for the mental symptoms.

Dr. HAYES NEWINGTON said he had but one contribution to make to the debate on the interesting paper which had been read, and that was with regard to the duration of the detention which was allowable in the reception house, to which Dr. Wigglesworth had attached so much importance as the outcome of the paper. It was really necessary to settle exactly what was being spoken about. He anticipated that Dr. Wigglesworth was speaking mostly of alcoholic cases. In that case perhaps a week's detention was sufficient. But if cases beyond those which were alcoholic were included, one's hands should not be tied to six weeks, or even three months. It should be remembered that those reception houses were intended to save people going into an asylum; and it would be a dreadful thing if there were a case in such an institution which was going to get well in ten or twelve weeks, and the law should step in at the end of six weeks and insist on the patient being removed to the asylum to complete the recovery there. Before attempting to form any opinion as to the length of time during which patients should be detained in reception houses, it was necessary to settle what class of cases it was proposed to deal with in them.

Dr. CROCHLEY CLAPHAM said there were two ways of treating cases of temporary insanity which were valuable. One was the treatment in general hospitals, which should be carried out in every large town in the country; and another was to allow voluntary boarders to go into private asylums without having to apply to a magistrate, and with the same facility as they could enter a lunatic hospital. Very often a patient would come to a private asylum as a voluntary boarder if he were allowed to write to the licensee of that establishment and say he wished to come in. The letter could be kept to show that it was the patient's own desire to come in. He thought that the restriction of making application to a justice of the peace should be done away with, and they should be put on the same footing as lunatic hospitals.

Dr. F. R. P. TAYLOR remarked that Dr. Raw in his valuable paper mentioned a patient suffering from visceral delusions who was cured by the removal of a fibroid tumour. Unfortunately, that happy state of affairs did not always follow. Whilst he was assistant medical officer at Claybury several years ago he performed two ovariectomies on patients, one of whom had well-marked visceral delusions. Dr. Jones had informed him that both those patients were in the asylum to-day. Therefore the removal of the tumour did not always cure the delusions. He desired also to offer a remark on the other aspect of the paper. It seemed evident that all were agreed that the detention of recent cases of insanity apart from the chronic insane was very desirable, and it would be well if the patients could be detained without a certificate, which really seemed to be a defect. The nearest approach to that appeared to be a reception hospital attached to the asylum, but as far removed from it as was thought desirable, so that it should be under the control of the medical superintendent. He believed some of the members of the Association had seen the asylum erected by the East Sussex County Council, which had a hospital apart from the main building to accommodate eighty patients, where every provision was made for the hospital treatment of the insane. He could not say very much as to the working of it, as it was not really in full working order yet, but he hoped that some day the members of the Association might see it for themselves. That was the nearest approach to reception houses which could be obtained.

Dr. BOWER said that one grasped generally the statements of the first part of the paper about the mental symptoms in bodily disorders, but what was really the purpose of Dr. Raw's paper was the establishment of the reception houses which he had mentioned. Dr. Hayes Newington, from his great modesty, did not mention the provision that had been made at the East Sussex County Asylum to which Dr. Taylor referred. He (Dr. Bower) happened to pay a pilgrimage last Wednesday to that very asylum, which was beautifully situated in the country, where all asylums should be. Tubercular cases were taken into the country, and there was a desire not to keep insane patients in towns and slums. Let insane cases go first to a hospital, from which any case which proved to be temporary could go out again without ever having gone up to the asylum proper.

The PRESIDENT said he felt that as the matter was so particularly dear to his heart, he having dwelt upon it in an extended form in his presidential address, he must not let it pass without saying one or two words. First with regard to receiving houses; he was certain all would conclude that they should not be in the heart of a crowded city; they should be at least suburban, get-at-able by the eminent physicians of the city if necessary, but away from the town, with private gardens and proper surroundings, with facilities for the outdoor exercise and amusements of patients, which were so essential for the treatment of all forms of insanity, especially acute cases. With regard to the period of detention at those receiving houses, he was at one with Dr. Wigglesworth, and thought that if elasticity were allowed in the matter of time they would rapidly be abused. In the Bill projected by the London County Council the clause dealing with detention ran as follows:—"The duration of the detention order in the receiving houses made by the justice is fixed at six weeks, but the period of detention may from time to time be extended by a justice, on the recommendation of any two members of the Visiting Committee, for any further period not exceeding three weeks at any time." By that means patients could be detained two, three, or four months, or longer, by three-weekly periods, and it could be very easily done. That would convert receiving houses into hospitals for the insane, and only the poor absolutely demented cases would be sent on to the proper place for adequate treatment—the insane asylum, with its hospital and fitting surroundings out in the country. Thus it was necessary to be extremely careful with regard to those receiving houses, and also with regard to the presiding genius over those houses. The man who presided there must be thoroughly trained in the care and treatment of the insane; otherwise there would be the old old story of the hospital for the insane in London, and the aim of the Bill of 1890 of the London County Council, with the view of eliminating psychologists and dealing with the care of the insane almost entirely by neurologists and general physicians, would be achieved. Those were points upon which it was necessary to have ample safeguards. If such safeguards were provided, all would be in favour of the proposed reception houses, believing that they would be eminently useful for those transient cases of insanity, more particularly the cases depending upon alcohol. The wards of a general hospital, too, as Dr. Raw mentioned, should be extended to certain cases, more especially cases of insanity associated with physical disease, and where operations were necessary, such as had been described by Dr. Taylor. He thought the Association was very much indebted to Dr. Raw for his contribution.

Dr. NATHAN RAW, in replying on the discussion, said he was extremely grateful to the members of the Association for the kind way in which they had listened to his remarks. He had been very pleased to hear the discussion which had followed his paper, because he was very anxious to have the views of the leaders in the domain of psychology. He thought that perhaps Dr. Wigglesworth had misunderstood him, as he never intended that reception houses should be in towns, but that they should be erected by the municipality or health authority of the town. Certainly such houses should be in some suburban district where they would have all the facilities for asylum treatment. He also thoroughly agreed with the President that the reception hospital, above all places, should be controlled by a mental expert, *i. e.*, by a man who had had training in lunacy work and thoroughly understood the symptoms and treatment of insanity itself. The only other point to which he wished to refer was that of the duration of detention. As the whole idea of the reception hospital was for temporary cases of insanity, and not for the ordinary cases, he thought the period of detention should be fixed, that it should not be elastic, but whatever period was decided upon it should be adhered to. His own view was that the period should be longer than that advocated by Dr. Wigglesworth; it should be at least one month. He mentioned six weeks in his paper because that was the period named by the London County Council. He did not think many cases would recover in two weeks; that was too short a time, except in cases of delirium tremens, which would probably pass off in from ten days to a fortnight.

Mongolian Imbecility. By C. H. FENNELL, M.D., Assistant Medical Officer, Darenth Schools.

THE type of imbecility with which my paper deals is chiefly met with in the special institutions and in the out-patient clinics of children's hospitals, and is fairly common in this country. The somewhat scanty literature of the subject, however, includes descriptions of the leading features of the class which differ a good deal in detail. This divergence of opinion is due, I think, mainly to the fact that observers are by no means agreed as to the degree of deviation from other types which qualifies an imbecile for inclusion in the Mongol group—a disagreement easy to understand when we realise that there is hardly one single feature which can be regarded as peculiar to Mongolism. Further, many recorded cases have been noted only at an early age, when certain later-developed aids to diagnosis are wanting. I have thought it of interest to record my observations of twenty-one well-marked cases met with among the 2000 inmates of Darenth Asylums, where the minimum age of admission is five, trusting that they may afford some guide to the mental and physical forecast advisable in dealing with the infant.

I would venture to define Mongolian imbecility as a condition of antenatally arrested development, bodily and mental, marked especially by brachycephaly, by a proneness of the tissues to low and chronic forms of inflammation, and by certain characteristic mental features. In only one of my cases, and that the least pronounced in type, was brachycephaly absent; it was associated in every instance with a greater or less tendency to straightness of face, and in more than half with a steep occiput. Indeed, the profile in these patients is fully as distinctive as the full face view. Dr. Sutherland has suggested that the familiar upward slant of the palpebral fissures may owe its origin to the arrested growth of the skull base. In three of my cases, otherwise unmistakable, this stigma was absent, and in one of these the direction was reversed. Some degree of obliquity is by no means uncommon in idiots who have no other claim to inclusion in the genus under consideration, and in examining a hundred such I found it present in

fifteen. The nose in the adolescent Mongol is almost always an aid to diagnosis, being short, and broad in its whole length, with nostrils looking more forward than usual ; these characters were present in fifteen of my cases, and in all the rest the shape was suggestive. Epicanthus was present in eight only. Evidence of blepharitis, past or existing, was found in more than half the total number, and I have found it a troublesome and recurrent complication. Double convergent squint was a feature in nine, while in two others one eye was similarly affected. The cheeks are usually flabby and redundant, lending themselves peculiarly to the facial contortions so frequently noted. A feature to which I would call attention as completing the facial picture is a uniform flush extending from the mala to the lower jaw ; this was almost constant in my cases, and contrasted markedly with the normal coloration of the cheeks.

Transverse or irregular fissuring of the tongue, with hypertrophy of the circumvallate papillæ, I found in every instance. I am tempted to regard this condition as pathognomonic of Mongolism in later years ; in the examination of the tongue in over two hundred idiots of all other types I met with none which at all recalled it. As regards the palate, Dr. Robert Jones has called attention to the frequency with which marked deformity occurs in this class ; I have found it invariably present, and characterised by a contracted vault with the sides sloping more steeply in front, so that an anterior plateau is formed—usually, but not always, ridged in the median line. Such a condition is of course not peculiar to the race, being fairly common in imbeciles of all descriptions.

The Mongol appears to be particularly prone to rickets ; fourteen of my series, or two thirds, bore evidence of the disease in the thorax. The abnormal laxity of ligaments described as permitting of hyperextension at the joints in the infant seems to disappear within the first few years of life, as I did not meet with it in any case, but its effects may possibly be traced in minor deformities usually ascribed to “defective growth or habit.” More than half my patients were distinctly knock-kneed, while several were flat-footed or scoliotic.

In thirteen cases, or nearly two thirds, the circulation was notably defective, as evidenced by coldness of extremities and proneness to chilblains. Of greater interest was the occurrence

of three cases of congenital heart deformity. Attention was called in 1899 by A. E. Garrod to the frequent association of this defect with Mongolism, and the combination was suggested to be usually fatal in infancy. Dr. John Thomson was unable at the time to recall any instances of it among his older Mongols. Such malformations are difficult of demonstration *intra vitam* in many cases, and it is quite possible that the autopsy might show the incidence among my patients to be actually a higher one.

The hands in this type are far less characteristic than those of the cretin, at least in adolescence. In fourteen out of twenty-one cases I found them short, and in sixteen patients the fingers as a whole were short also, but the latter showed no constant shape, and were stumpy and tapering in about equal proportions. Relative shortness of the thumb and little finger was usually absent, and in no case striking. Incurvation of the little finger I have commonly met with among idiots of all classes, and I find my observation confirmed by the exhaustive analysis of Park West. The feet were occasionally short and clumsy, but more often normal in shape.

The deep reflexes have been described as always diminished or absent in the Mongolian. In mine, on the contrary, they were distinctly brisk in nine, normal in six others, and absent in five only.

The skin was almost without exception rough, dry, and papillated; in about two thirds of the number it showed the slight hirsuties often seen in strumous children.

As regards mental development, I have not encountered a definite instance in which the imbecility rose above a low grade. It may be objected that in a special institution only the most marked examples of any type are likely to be met with; but none of the Darenth Mongols are to be found in any but the lowest classes of the school, and I am tempted to think that the examples of scarcely deficient mental ability which have been described were somewhat near the borderland of the group. Generally speaking, the more marked the physical stigmata, the deeper has been the amentia. The child is cheerful, affectionate, easily amused, and often a born mimic, and these traits are apt to raise false hopes of educational possibility. But the usual result of some years' training has been that, although his amiable disposition has prompted the

teachers to exceptional efforts at training, only slight progress has been shown in manual work, and little or no capacity for reading or counting. It has been stated that the Mongol is readily taught habits of cleanliness, but only one third of my cases were reliable in this respect, while three of the remainder were habitually wet and dirty after years of careful attention. In one instance only—that of a man of twenty-seven—has the trained faculty of imitation produced much practical result; the patient in question can do a good deal of ward work, such as scrubbing, making beds, etc. In this instance mimicry is strongly developed; the patient can imitate for weeks afterwards features in a theatrical entertainment which have caught his fancy. But he can only make a few barely intelligible sounds, and is quite childish in manner and habits. Only one other of my cases has learnt to make a bed.

In fine, the Mongol is a child of much promise but small performance, and I would suggest that in all cases seen in early infancy a much guarded prognosis should be given as to the mental outlook.

DISCUSSION

At the Annual Meeting in London, July 17th, 1903.

THE PRESIDENT.—I am sure we thank Dr. Fennell for his short and to-the-point paper on Mongolian imbecility. He has enlightened me upon one subject. I always thought a Mongolian imbecile was one of the educable classes, but he tells us, from his experience, that it is a class of much promise but small performance.

DR. FLETCHER BEACH.—I, with you, sir, thank; Dr. Fennell very much for bringing this class of case before us. As he says, they are a fairly numerous class, and I have had as many since I have been in practice on my own account as during the time I was at Darenth. The curious thing about Mongolian imbecility is that it seems to be more common now. It may be that we recognise the condition more readily than we used to, and there is no doubt that the stigmata which Dr. Jones states were usually present are not present in all the cases. I used to show cases to Dr. White's students and students from many of the hospitals in London many years ago; I would have five or six cases, and show the points in one and then in another, so that the students might get an idea of what the stigmata were. Very often you will get the typical condition of the tongue, with the rough skin on the hand, but you do not get the epicanthic mark, and often you may not see the squat nose and undeveloped ear. I do not know whether Dr. Fennell noticed the turning in of the little finger, but that is a point which has been noticed considerably of late. A curious thing is that in general practice Mongolian imbecility is so often mistaken for cretinism. I remember some years ago, after having been on my holiday, I found in my ward a case of Mongolian imbecility which had been labelled cretinism, and the physician had been treating it with thyroid, and wondered why he had not been able to get any good result out of it. I pointed out to him the difference between the two, but as a matter of curiosity I kept on with the thyroid to see if any change occurred; however, I found absolutely none. The prognosis, as Dr. Fennell says, is bad. There is the instability of the brain, which, I think, is proved by *post-mortem* and micro-

scopical observation, in which the cells are seen to be badly formed. Therefore it is clear that we could not expect much improvement.

Dr. ANDRIEZEN.—I agree with Dr. Fennell's description of the type, which I frequently encountered when I was at Darenth. But since then I have come across, in private practice, during the last two years, two cases that struck me as being of a much milder and weaker type, and capable of education. One was a boy thirteen years of age, who was seen by me about March or April last year. I should classify him as a high-grade imbecile, capable of a good deal of education. He presented the characteristic features and physiognomy of the Mongol type. But at Darenth I never saw a case capable of improvement; they were generally of dirty and degraded habits, which nothing seemed to alter. As Dr. Fennell has paid special attention to these cases, I should like to ask him what he considers to be the cause of this special type of idiocy. Of course very many cases of idiocy are due to tuberculosis or syphilis or alcoholism in the parents, but there must be some special reason for the production of this peculiar type of degeneration. Many years ago Morel, in his great work on the subject of types of degeneration of human species, dealing largely with cretinism, also mentioned types, of which he gave photographs, approximating to the Mongolian type. So it would seem that there is yet some unsolved question as to the exact cause of this particular type approximating to a particular race. I wish to express my admiration of the excellent paper which has been read.

Dr. MORRISON.—It is said that the Mongol is a genus by himself in the human family, and if there is one thing that distinguishes a Mongol it is his dietetic habits. I would like to ask Dr. Fennell in what particular does the common habits of diet of the Mongolian differ from those of the ordinary European or Asiatic? Are his common staple articles of food and drink different in kind or degree? If rickets is recognised to be the pathogenic substratum in cases of Mongolian imbecility, we know that rickets is largely prevalent north of the Tweed, and this is largely attributed to the dietetic habits of the people. I wonder if the pathogenesis of Mongolian imbecility can be safely ascribed to the dietetic habits of the people, or more directly to marital consanguinity; I only rose to ask this question.

Dr. ROBERT JONES.—I listened with a great deal of pleasure to Dr. Fennell's paper, and I must say that this class of imbeciles interested me very much in my early days. I went into office at the Earlswood Asylum almost immediately after taking my degree, and saw a good deal of the habits of this class. They almost invariably sat cross-legged, tailor fashion. Whether this is an atavistic return to their racial character I am unable to say. Another interesting thing is that Dr. Fletcher Beach says they are more common now than many years ago. I have on more than one occasion seen these Mongols driving in smart carriages through the Park in the care of their nurses. One never comes across them in ordinary lunacy practice, but I have occasionally seen them in this way. One more point. The family history of these cases is, as far as my own researches have gone, that in many instances these children are the youngest of a very large family. Even where that is not so there has been a very marked disparity in the ages of the parents. The fact stated by Dr. Beach that this type is now more common may have something to do with what we heard yesterday in our President's address in regard to the greater prevalence in these days of late marriages; our social system is now more complex, and one of the features of our social life is that marriages are much later than they used to be. Has this anything to do with the more frequent occurrence of the Mongolian type? Finally, I have never seen a grown-up Mongol, *i. e.*, out of an asylum, and I only once saw an adult over twenty-five years of age in an asylum; that was at Colney Hatch during the time I was on the medical staff. They seem to die off before maturity. I have never seen in them any tendency to suicide; they seem very fond of music and very imitative, but in spite of this they do not improve.

Dr. MORR.—I would like first of all to congratulate Dr. Fennell upon this very interesting paper. It is the sort of work we want, to collate facts and bring them before us in a short paper like this. The question is, Is there a convolitional physiognomy which one can correlate with the external physiognomy of the individual? Does it resemble a Mongol brain? I have a Chinaman's brain, and I shall be glad to give Dr. Fennell a photograph of that brain. As you perhaps know, it is very difficult to get a photograph of a Chinaman's brain, and especially

the brain itself. It presents some very important features which are not found in ordinary brains.

Dr. FENNELL.—I have to thank you for the kind way in which you have received my paper. Dr. Beach suggests that the cases are commoner than they were in his time at Darenth. I think that is so, because I have only selected twenty of the most marked in the institution of which he was formerly superintendent. With regard to the in-turned little finger, I do not think that is characteristic of the Mongolian, because I have found it in imbeciles of other types. Dr. Park West recorded an analysis of the shape of the little finger in 600 normal children, and he found incurvation to exist, to a greater or less degree, in a very large proportion of them; it was quite as large a proportionate number as is seen in Mongols. Dr. Andriezen asks if any suggestion can be made as to the causation of this form of imbecility. With regard to the facial peculiarities, I think Dr. Sutherland's theory that deficient growth of the skull base is responsible for the features is quite plausible. But the fissuring and hypertrophy of the papillæ in the tongue do not come under this category, and it can only be regarded as a happy suggestion in accounting for many of the features commonly met with. I cannot satisfy Dr. Morrison as to the dietetic peculiarity of Mongols; I have not noticed that there are any special points about them in that respect. I do not think the Mongol shows much interest in his diet, and he is found to conform very readily to the rules of the institution in which he is placed, and to the diet he is supplied with. Dr. Robert Jones mentioned the family history in this type. I cannot say that my statistics in this respect are worth anything, because I have not been able to secure that personal contact with the friends of the patients upon which all statistics of value are based. But I have sent out forms and interviewed some friends. I found that phthisis was traceable in the immediate forbears, or brothers or sisters, in nine out of twenty-one cases. I found the mother's health was unsatisfactory in an early period of the pregnancy in twelve out of twenty-one cases. A neuropathic history I have found in only nine. Of my cases five were the last-born of a large family, and two were the last but one. In the remaining cases the position in the births of the particular child was not suggestive. Dr. Muir also arrived at that conclusion in a recently published paper. Dr. Mott speaks of the peculiarities of the Mongol brain. I have had no *post-mortems* on Mongols at Darenth during the last six months, but I had two when I was medical registrar at Great Ormond Street. In one case there was a simplicity of convolutions, but I am sorry I did not take a photograph of the brain. I was not then so much interested in this type as I am now. But, as Dr. Jones says, these imbeciles seldom survive to maturity, and I have no doubt I shall have several *post-mortems* to record in a subsequent paper.

A Short History of St. Luke's Hospital. By WILLIAM RAWES, M.D., F.R.C.S., Medical Superintendent.

ON June 13th, 1750, Dr. Thomas Crow, Mr. William Prouting, and four other gentlemen met in a tavern in Exchange Alley, their object being to promote the establishment by subscription of a hospital as a further provision for poor lunatics. They drew up certain "considerations," which were printed and distributed to the public. Others were subsequently added. Epitomised, they were as follows:

1. That although the metropolis abounds in hospitals and

infirmaries for almost every distemper attending the poor, it is desirable to extend this form of charity one step further.

2. That persons afflicted with this worst of all diseases are not admitted into any hospital but Bethlem, a small ward in Mr. Guy's only excepted.

3. Experience has long shown that the hospital of Bethlem is incapable of receiving and providing for all the unhappy objects of this sort who make application for it. This truth can be attested by every governor of that house, and by every person to whose lot it has fallen to solicit the admission of a patient into it.

4. That by this unavoidable exclusion or delay in the admission of patients many useful members have been lost to society, either by the disorder gaining strength beyond the reach of physic, or by the patients falling into the hands of persons utterly unskilled in the treatment of the disorder, or who have found their advantage in neglecting every method necessary to obtain a cure.

5. That many families (in no mean circumstances), through the heavy expense attending the support of one object of this sort, have themselves become objects of charitable relief, and thereby doubled the load and loss to the public.

6. That the most fatal acts of violence on themselves, attendants, and relations have been often consequent on the smallest delay in placing the afflicted with this disorder under the care of persons experienced in guarding against and preventing attempts of this kind.

7. That no particular provision is made by law for lunatics, the common parish workhouses being in no way proper for their reception, either in point of accommodation, attendants, or medical assistance.

8. That the joining this to any other hospital not particularly adapted for the reception of lunatics would be highly improper and dangerous; the joining it to Bethlem would deprive it of two of its principal advantages—the being under the immediate inspection and government of its own patrons and supporters, and of introducing more gentlemen of the Faculty to the study and practice of one of the most important branches of physic, already too long confined almost to a single person.

9. That the patients shall be submitted to the supervision

of trained individuals, and all possible precaution will be taken in the establishment and future direction of this charity to prevent any abuse of any kind.

10. That the patients shall not be exposed to public view.

Such were the motives of the promoters of this design. The proposals were so well received by the public that on September 12th, 1750, a committee of fifteen was formed for carrying into effect the object in view.

On November 8th a lease was obtained from the City of London of the premises in Moorfields known as the "Foundry," then being used by the Rev. John Wesley as a meeting house, and whose lease was just expiring.

Workmen of "abilities and integrity," under the supervision of Mr. Geo. Dance, the City Surveyor, began on December 27th to make the necessary alterations, and in seven months the building was ready for the reception of twenty-five patients—the number originally agreed upon.

Meanwhile the Committee drew up rules and regulations for the administration of the hospital and admission of patients. So carefully were these thought out that, except for a few additions and some slight alterations in minor details, they held good for 100 years. Indeed, many of them are still in force.

Dr. Battie, a man whose ideas were at least fifty years in advance of his generation, was appointed physician; Mr. J. Sheron, surgeon; while Mr. Prouting and five other apothecaries agreed to attend and supply medicines free of cost for three years. A male and female keeper, with two servants and a gate porter, were engaged.

At a general meeting held on June 26th, 1751, the name of the hospital was agreed to; the rules and orders were read and confirmed; the President, Vice-Presidents, and Committee were elected; and the following resolution was adopted, *i. e.*, "That the Governors do dine together at five shillings each, the exceedings to be paid by the Stewards, who shall deliver out tickets to the Governors and their friends, and that no French wines be drunk at such meeting." This resolution was passed at each annual meeting for the next ninety-five years, with an increase in the price of tickets from time to time, but always "with the same limitations in respect to wines as at the first dinner."

The instructions issued to persons who applied for the admission of a patient state—

“That no person shall knowingly be received as a patient into this hospital who is not in point of circumstances a proper object of this charity,—that is, poor and mad.” Lunacy of more than twelve months' duration, or discharged uncured from another institution for lunatics, idiocy, persons suffering from epileptic or convulsive fits or venereal disease, and pregnant women were declared to be ineligible. “And every such person who through mistake or misinformation shall be received into this hospital shall be discharged immediately on a discovery of any of the above disqualifications.”

They go on to say: “Therefore, if the patient is not disqualified by any of the above rules, upon application the forms of two printed certificates, together with a petition, may be had—the first of which certificates (*after it is filled up*) must be signed by the minister and churchwardens or overseer of the poor of the parish, and the other by some physician, surgeon, or apothecary who hath visited such patient; after which the person or persons who saw them sign must go before one of His Majesty's justices of the peace, or some other person authorised to take affidavits, and make oath (or, in the case of Quakers, an affirmation) in a manner as is printed at the bottom of the certificates.”

The certificates then had to be signed by a Governor, and, together with the petition, left with the secretary, who registered the date and exact time of delivery. The petitioner was required to attend the next committee meeting, when the certificates were examined; and, if approved, an order was made for the patient to be brought for examination in his turn.

The petitioner had also to find two substantial householders residing within the “bills of mortality” to enter into a bond of £100 to remove the patient when discharged. No Governor of the hospital could be security for any patient.

The hospital was opened on July 30th, 1751, with the admission of two male and four female patients, and before the end of September twenty-three had been admitted.

The very elaborateness and strictness of their rules soon begot trouble in various ways, but the Governors, who were a law unto themselves, were determined their regulations should be carried out to the most minute detail.

To give but one instance out of many. On October 4th the following letter was ordered to be sent to the minister of the parish of St. Giles, Cripplegate :

"SIR,—I am directed by the Committee of St. Luke's Hospital for Lunatics to inform you that the petition on behalf of M. B— was this day rejected, it appearing that you had signed the certificate unto annexed before the same was filled up, and that the churchwardens after your example had done the like. They hope this will be a caution to you for the future not to mislead ignorant people and impose upon the Committee.—I am, your humble servant, THOMAS WEBSTER."

The patient was admitted a fortnight later on fresh certificates.

The number of patients rapidly increased, and by June, 1752, fifty were in residence. The next year twenty more were added. Up to 1754 the male and female patients seem to have inhabited a day-room in common. The building in this year was enlarged, the sexes separated, and ten patients who had been discharged "uncured" were readmitted at five shillings per week.

In 1765, it having been found impossible to get six apothecaries to attend free of charge, a resident was appointed, his duties being to visit sick patients, to dispense medicines, and carry out the orders of the physician.

During the first twenty years the hospital was so highly esteemed by the public, donations and subscriptions increased to such an extent that the Governors felt justified in passing a resolution in 1771 to build a new one on a larger scale. They tried to buy sufficient land in Finsbury, but failed.

After much negotiation a lease "in perpetuity" of the present site was obtained from the Governors of St. Bartholomew's Hospital. Briefly, the terms were : to pay £200 a year, with a fine of £200 every fourteen years. In event of the hospital ceasing to be a charity for the insane, either from want of sufficient funds or any other cause, the ground, with all buildings and fixtures thereon, shall revert to the use and benefit of the Governors of St. Bartholomew's Hospital.

The signing of that lease—a matter simple enough at the time—was the most momentous event in the annals of this hospital.

The site comprised three and a half acres, and was known as

"the Bowling Green," with much waste land around it. The foundation stone of the present building was laid by the Duke of Montague on July 30th, 1782. It was designed by Mr. Geo. Dance, jun., who supervised the work and gave his services free of cost. It was erected by voluntary subscription at an expense of about £50,000, and sufficiently advanced by November, 1786, that permission was given to the public for one month to view the interior. Such crowds availed themselves of the permission that it had to be extended another week. The Committee reported they had every reason to assure the Governors that the building met with general approbation.

Elms, who wrote at the time, says, "There are few buildings in the metropolis—perhaps in Europe—that, considering the poverty of the material, common English clamp bricks, possess such harmony of proportion with unity and appropriateness of style, as this building. It is as characteristic of its uses as that of Newgate, by the same architect."

That it was solidly and substantially built admits of no two opinions. Those who have had to make structural alterations know it only too well. The main walls are from 27 to 36 inches in thickness, and so hard that merely to drive a hole through one of them for a water-pipe is a formidable undertaking.

The new building, although not quite completed, was opened on January 1st, 1787. The old hospital was abandoned, and the 109 patients then in residence were brought over without accident or inconvenience. When completed the hospital was capable of accommodating 200 acute and 100 incurable cases.

The management was entrusted to Mr. Thomas Dunstan, who had had no medical training, but had been at Bethlem Hospital eight years. His wife acted as matron, and had charge of the female side. A physician visited three times a week, while such medicines as were used were dispensed by a resident apothecary.

In order the better to be able to appreciate the changes that have taken place during the last century, let us pay a visit to the hospital in October, 1803, and get Mr. Dunstan to show us over it. The wards are shut off from the central portion by thick upright iron bars and heavy iron gates, which afford a complete view of their whole length on each side. The south side of each ward contains seventeen single bedrooms, ventilated

by grilles above the doors, and lighted by small half-moon-shaped windows containing four panes of glass not much larger than a man's hand, so that scarcely a ray of sunlight can penetrate. Besides single rooms of a like kind, there are eight large windows on the north side capable of being opened at the top, but strongly guarded by thick wire netting, through which can be seen on the male side the parish burial ground, with perhaps a funeral taking place. The females are better off, as opposite is a recreation ground used for playing bowls, and a large fish-pond patronised by boys and youths in summer as a bathing-place.

The wards open directly into the wings, so that a classification of patients is not possible on any floor. There is no furniture beyond bare tables and wooden forms. The walls are not even whitewashed. There are no fireplaces or any means whatever of heating the wards. Padded rooms are unknown. There are no infirmaries or places where sick patients can be treated apart from the others. There is a large cold-water bath in the basement on each side, into which the patients are thrown when occasion requires, but facilities for a warm bath do not exist.

In the wings are rooms capable of containing four patients each, besides several single rooms. Each patient has a wooden trough-shaped bedstead fixed into the wall and containing loose straw, which is covered with rough sacking in the cases of convalescing patients only. There are nearly three hundred patients in residence, two thirds being acute cases. The incurable patients are kept in the basement, many of them chained to the wall, though allowed a fair latitude of movement. All have loose straw to sleep on, but no bedstead. The noisy acute cases are in seclusion; those who are violent are chained to their bedsteads, covered only with a loose rug, or in the case of females with a loose blanket gown.

The patients escape being bled and purged periodically every spring and autumn, as is the prevalent custom. The medical treatment consists principally in the use of anti-spasmodics, emetics, and purgatives. We find on the minutes such entries as the following:—"Dr. Simmons having acquainted this Committee that J. S— is in too weak a state of health to take medicines proper for her lunacy,—ordered, 'That her securities be written to, to take her away.'"

Basins, tin plates, and spoons only are in use at meal times. The food is good in quality and admittedly sufficient in quantity.

The staff consists of three male keepers, one on each floor, besides two assistants; while there are on the female side a matron, an assistant matron, and four attendants. It frequently happens that the male attendants are required on the female side to quell disturbances.

Taking it altogether, the wards are clean, and although dark, dreary, and dismal, are free from offensive smells.

Mr. Dunstan informs us he has never seen much advantage from medicines, and that he relies chiefly on management. He alone has the power of ordering a patient into seclusion, or of putting on manacles, which he does when necessary on account of violence, and as a punishment when patients misbehave themselves, as he firmly believes fear to be the most effectual principle by which to reduce the insane to orderly conduct. The strait-waistcoat is seldom used, as he considers it more heating; it confines the upper arms, is not so pleasant to the patient, and is more hurtful to the joints;—whereas the *idea* of the chain is half the confinement to them; it gives more liberty, and does not stop the circulation of the blood. If the patients are wet and dirty they are kept in bed one day, their clothes are washed, then put on again, and the patient permitted to walk about. The attendants have strict orders to see that every patient sleeping in an associated room is safely chained before they go off duty.

This sounds like the weird imaginings of a hideous dream. But glance for a moment at the criminal laws as they existed in this country until almost within living memory, when youths were sentenced to the severest punishments, even to death, for offences that would entitle them now to be let off under the "First Offenders Act," and we can easily see that the spirit and ideas of that age forbade any striking or rapid reform in the treatment of the insane.

At that time, and for many years afterwards, St. Luke's was looked upon as the best managed institution of its kind in Europe. There was certainly far less restraint used, and of a less barbarous character than obtained elsewhere. We learn that patients were admitted strictly in the order of their application, without favour or partiality. No influence could break through this standing order, and the nominations

of Governors were rejected if the patient was ineligible according to the rules.

At first sight it seems remarkable that such rules should have been framed and insisted upon during an era of the most shameless bribery and corruption this country has ever known, but it was precisely on account of this notorious corruption that these regulations were made. Indeed, we find that at those points where abuse was the most likely to creep in the most stringent rules were framed to anticipate and prevent it.

There is no record at this time of the numbers wanting admission, but ten years later there were 700 patients waiting for the next vacancy on the incurable list; only two or three such vacancies occurred during the year, and the average time each had to wait was from ten to twelve years. For every vacancy on the acute list there were from twenty to thirty candidates. Consequently it was quite usual for the Committee to receive reports that patients were recovered or dead when their turn came for admission. Patients were then, as now, received from any part of the kingdom, and there are many curious instances of difficulties and delays in conveying them. Thus it is recorded that "M. B— could not be admitted, the petitioner attending and acquainting this Committee that she cannot be found, he believing she hath run away from the waggoner who was to bring her up to town." Great delay happened in the case of a maniacal patient being brought from Plymouth in the depth of winter, he being nearly three weeks on the road.

In 1805 the lunatic ward at Guy's Hospital was closed. A petition was received by the Governors to take the remaining patients at £50 per annum each. Although it was four times the amount they were charging for their own incurables, they refused it.

From the year 1754 it had been customary to send patients out of the hospital for physical maladies, and to readmit them when their condition permitted; but "leave of absence on trial," as we understand the term, was first adopted in 1807. Except for an abortive proposition in 1825 to form a ladies' committee, there is little of importance to note until 1829, when a second physician was appointed. During the next two years divisions were made between the wards and the wings, thus affording a system of classification of patients. Some

warm baths were erected on both sides, and places supplied with warm and cold water for washing purposes. A "slipper" bath on a travelling carriage had been in use for three or four years previously. Water-closets were introduced. Improved windows were put into many of the sleeping apartments. The staff of attendants was increased. Night attendants were appointed on both sides, and "tell-tale" clocks first used in 1831. The next year patients were allowed the use of lamps in the evening.

In 1836 "confining chairs" were introduced. The physicians state, "They have been attended with most satisfactory advantages, and may be considered as a decided improvement in the management of the afflicted patient in the diminution of personal restraint."

County asylums were at this time being opened, and the hospital gradually ceased to admit parish patients.

A legacy was left by a Governor in 1839, the interest from which was to be given for the encouragement of good and humane attendants.

Infirmaries were fitted up in every ward and wing in 1841. The next year a chaplain was appointed, and a building, formerly used as a cholera house, was converted into a chapel. The night restraint was abolished. The physicians report, "The patients who were every night confined by the wrist- and leg-locks were necessarily dirty, but now that they are able to get up they have become as cleanly in their habits as the rest of the patients." All wire guards were removed from the windows, a library was started, and an amusement fund established for the purchase of bagatelle and other games for the use of the patients.

A resolution was passed in 1844 that the wards should be heated. It was thought if some system of heating by means of hot water could be adopted, it would be both safer and more economical. Experiments were tried with the best methods then known, but all proved worthless, so open fires were resorted to. To again quote an extract from the physician's report, "Now seldom, and certainly not to the same extent, is to be seen damp rolling down the walls of the bedrooms, and counterpanes wet with the moisture deposited from the air. The patients seldom complain of chilblains, and the fires have removed all chance of a recurrence of those particular incidents

attendant upon cold feet with a feeble circulation, *viz.*, gangrene of the toes." From this time there was a steady improvement in the internal arrangements. Restraint fell more and more into disuse, and may be said to have ceased by 1851.

In 1852-3 baths were erected throughout the hospital. A new chapel was opened. The drainage system was completely remodelled. The location of incurable patients in the basement was abandoned. A proposal was made to form a country establishment, but could not be carried out for want of funds. This proposition, although kept constantly in view by the Governors, was not realised until just forty years later.

Many improvements were made in the dietary; cocoa and tea were substituted for gruel at breakfast, and a more liberal allowance of meat was made. The walls separating the dining rooms from the wings on the female side were removed. Recesses were made in each of the wards by taking away three bedrooms on the south side and enlarging the windows. Most of the fixed troughs were removed and bedsteads substituted. The wards were to a certain extent decorated, and the hospital practically refurnished.

Whereas in 1847 there were ninety females and forty-five males waiting for admission on the incurable list, and the average time each had to wait was three and a half years, in 1853 there were no males and only thirty-eight females—a diminution due to the opening of more county asylums.

Persons in receipt of parochial relief were declared ineligible for admission, and in 1858 the minimum charge for incurable patients was fixed at one guinea per week, and for the first time curable patients were asked to pay towards their maintenance if their circumstances permitted; otherwise they were received free.

In 1856 the Committee ordered the use of the plunge bath to be discontinued, notwithstanding a favourable report by the medical officers as to its use and value in certain cases if due precautions were adopted. Curiously enough, a letter was received by them from almost the last patient thrown in, expressing his thanks for the treatment he had received, highly eulogising the bath, and asserting it had been the cause of his recovery.

The decade 1850-60 had been one of considerable activity. Charles Dickens, always a warm friend and admirer of this

hospital, wrote in the visitors' book on January 15th, 1858, "Much delighted with the great improvements in the hospital under many difficulties, with the excellent demeanour of the attendants, and with the benignant and wise spirit of the whole administration."

The cost of these alterations and improvements so seriously depleted the funds that special appeals to the charitable public were rendered absolutely necessary. These appeals met with very moderate success, and in 1870 the Committee fixed the rates of payment that exist now.

From the opening of the hospital up to December 31st, 1902, there have been admitted 24,432 patients. Of these 2398 died in the hospital. There have been discharged cured, 10,559; relieved, 5036; not improved, 6261; and 4 as not being insane.

If we include in these admissions all patients who have been discharged uncured and subsequently readmitted as incurable; patients admitted and discharged immediately from being improper or unfit objects for this charity; those discharged at the desire of friends before treatment had been completed; all transfers and invalid admissions from whatever cause (altogether a total of 5000); nevertheless the recovery rate calculated on the total admissions is *43 per cent.*

Previous to 1830, when the physicians made their first annual report, the records relating to the health, condition, etc., of the patients are somewhat imperfect and unsatisfactory.

There is no evidence of any outbreak of typhus or typhoid fever during the first hundred years, which is much to be wondered at considering the nature of the water-supply, the primitive sanitary arrangements, and the often over-crowded condition of the hospital in former times. Cases of smallpox, however, not infrequently occurred, and they were promptly sent for treatment to the Smallpox Hospital.

In 1833 Asiatic cholera broke out. Twenty-three patients were attacked, of whom nineteen (all incurable) died.

In 1848 there was an epidemic of diarrhœa with sixty-seven cases (none fatal), and twelve patients were attacked with cholera, of whom four died. The parish burial ground was credited with having polluted the well from which the hospital up to that time had drawn its main water-supply.

This epidemic was truly a blessing in disguise; it resulted

in both the well and the burial ground being closed. The physicians noted that in each instance cholera had followed a severe epidemic of influenza in the previous year.

Seven mild cases of scarlet fever in 1897 is the only other outbreak of any note.

Considering that every species of acute insanity, from the actively suicidal melancholiac to the homicidal maniac, has been admitted, the hospital has been singularly fortunate in the fewness of serious accidents. Instances of fracture are mentioned at long intervals—one, a fracture of the skull in 1849, which proved fatal,—but there has been no case of homicide. A suicide is recorded as having happened in the hospital in 1825, one in 1845, two in 1852, and one in 1897—making five in all.

Provisions always figure as the largest item in a hospital's expenditure. Fairly complete records have been kept, but it would be out of place to enter into any detailed account, although it possesses great historical and political interest. Nevertheless the cost of provisions has had the greatest influence on the Governors in making charges for the maintenance of patients.

The first contract was entered into in 1751 as follows:—Second bread and best flour at 3*d.* per peck, under the assize; best oatmeal at 4*s.* per bushel; good Gloucester cheese at 3*d.* per lb.; good Cambridgeshire butter at 6*d.*; best salt ditto at 5½*d.*; beef and mutton at 1*s.* 9*d.* per stone of 8 lbs. Later we learn that contracts for flour, butter, cheese, etc., could not be made on account of the high prices, owing to the great demands made for victualling the navy.

During the Napoleonic wars, and owing partly (as they say) to the shutting of the ports preventing the return of foreigners to their own country, the high price of provisions compelled the Committee to demand a payment of £3 for each acute case on admission, £6 for each parish patient, and to raise the payment for incurable cases to 7*s.* per week. When food became cheaper the payments were lowered, and finally abolished in all acute cases. This sequence of events was repeated in the forties and fifties, except that the payment for incurables was not reduced.

The price of meat seems always to have been comparatively reasonable, and contracts for this food were made regularly.

There have been nine visiting physicians, whose terms of office range from twelve to thirty years. The last physician

resigned in 1891, after twenty-nine years' service. Ten gentlemen have held the appointment of surgeon for periods varying from two to thirty-five years.

Of resident apothecaries and medical superintendents there have been eighteen, holding office from six months to thirty-seven years.

Mr. Thomas Webster, his son, and grandson acted as secretaries from 1750 to 1849, a period of ninety-nine years.

From 1751 to 1882 there were only four stewards and four matrons, which is probably a record for any institution. There are also some very remarkable instances of long service by attendants and servants.

Time permits of only a brief allusion to the fact that St. Luke's Hospital was the first institution of its kind in this country to offer to medical men and students facilities for acquiring a practical knowledge of mental diseases. The concession was given in 1753. It has twice been withdrawn, for reasons that are not stated, but has recently been granted again.

Since 1872 there have been two qualified clinical assistants in residence, each appointed for six months.

Much misconception seems to prevail in many quarters concerning the funds of this hospital, and always in the direction of over-estimation. Until the Convalescent Establishment Estate was bought the hospital had owned no land. The funds have been invested in such securities only as are permitted by law to trustees, the interest from which—with one exception—has never reached £5000 in any year. This sum, together with donations, subscriptions, and the small payments received for the maintenance of patients, has been the amount the Governors have had with which to carry on the work.

The minutes of the various committees have been recorded with great care. Some incidents that might be construed as telling rather against the Governors are set down with fidelity. There is, however, ample evidence to show that they have ever lent a willing ear to any suggestions for the improvement of the hospital.

It may perhaps be considered they have been slow in progress at certain times and over-cautious in their methods; but it must be borne in mind that the Committees of Management have always strictly regarded their position as that of respon-

sible trustees, zealously guarding funds, always limited in amount, upon which, as has already been shown, the demands were very heavy. Any lack of business prudence or foresight might have produced disastrous results. Apart from this, the restraining influences of a lengthy tradition, from which it was often difficult to break, and the ever-changing notions on the subject of treatment and accommodation of the insane, naturally tended to make them cautious in adopting new schemes until proved to be sound by the surest of all tests, *viz.*, results.

The most captious critic who reads carefully through their records cannot fail to be filled with admiration at the honesty of purpose and sterling integrity of the founders and their successors; and, if we pay regard to the times and circumstances, will be far less inclined to think they might have done more than to wonder they have done so much.

DISCUSSION

At the Meeting of the South-Eastern Division at St. Luke's Hospital,
October 29th, 1903.

The PRESIDENT said he felt sure, from the applause which greeted the paper, that the members desired him to thank Dr. Rawes, in their name, for his very interesting account of the history of the institution in which they were meeting. All were charmed and delighted to hear that the old institution had accomplished so much good. To be able to show a recovery rate of 43 *per cent.* over so long a period was in itself a certain proof that the hospital had existed for the benefit of the public for whom it was built. There were many points in connection with it which those who had gone through the institution would be struck by. There was about it an air of homeliness and comfort which, he thought, beat that of many modern asylums, and certainly many patients highly appreciated that quality. There were many other points to which modern asylum superintendents would take exception; but, considering all the difficulties under which St. Luke's had existed in the heart of the metropolis, it was perfectly marvellous to him that such good results had been achieved by those who worked in it. It only proved what could be done by a committee and officers imbued with the true spirit of humanity and that high principle of doing all that was good for the people committed to their charge.

Dr. D. G. THOMSON joined the President in congratulating Dr. Rawes on his excellent paper. He (Dr. Thomson) had charge of one of the oldest asylums in the country, and that increased his interest. He looked forward with pleasure, when the paper was published, to comparing the dates with those of his own institution. He was a little astonished at the statement that restraint was not entirely abolished at St. Luke's until the year 1851. If so, the metropolis must have been a little behind the times, because in 1838, when Dr. Gardiner Hill was house surgeon at Lincoln Lunatic Asylum (or hospital, as it is now), restraint was abolished, or at all events in the following year. The paper was one not so much for discussion as for admiration, and he looked forward to a closer study of it when it appeared in print.

Dr. BOWER said he would like to congratulate the Division upon the excellent paper read by Dr. Rawes, and also to compliment him and the Governors of the hospital on the very prominent way in which the charitable element had been kept to the fore right from the foundation of the hospital in the middle of the last

century but one. St. Luke's was one of the few hospitals which were ready at all times to take in a patient at charitable rates. Some of the other hospitals afforded magnificent accommodation for high-paying patients, and also were doing a certain amount of charitable work. He had never been refused permission to send a patient into St. Luke's Hospital at charity rates, and he knew many other people who had had a similar experience. That was a very strong point in its favour. He thought that the Division ought to congratulate the committee of the hospital and Dr. Rawes on the wonderfully bright and cheerful interior that had been evolved out of an old thick-walled building on a cramped site.

Dr. RAWES, in reply, said he was extremely obliged to the members for the very interested and kind way in which they had listened to his paper. He had called it "A Short History of St. Luke's," but he feared it was really only a sketch. The cupboard full of books which could be seen represented the minutes of only one committee, and there were three others. To wade through these and compress their contents into anything like reasonable compass was certainly a matter of considerable difficulty. Therefore he was left with the choice of picking out what he thought would be the most interesting to the general body of members of the Association. From his view there were many interesting points recorded. Regarding the President's reference to the recovery rate of 43 *per cent.*, that figure was arrived at by looking at the matter in the most unfavourable light possible, and by reckoning the recovery in the most unfair manner. It must be remembered that originally when patients were admitted they were admitted as curable patients. They were given treatment for one year free of charge. If at the end of that time they did not recover, patients had to be removed by their friends, taken home, and kept there or elsewhere until a vacancy occurred on the incurable list; and, as he had pointed out, they might be there for many years. A patient who had been discharged "not improved" was taken back as a fresh admission. So there were either two "not improveds" or one "not improved," and a death, for one patient. That was a manifestly unfair way of reckoning. In the present system of reckoning, for example, transfers were not reckoned as admissions. The cases were not selected, though of course epileptics were not admitted, in accordance with the rules of the institution. But in taking the general hospitals, the fairest way was to take the average recovery rate of those hospitals for the last five years. The average recovery rate of the general hospitals he found to be 47·2 *per cent.*, while that of St. Luke's was 51·4 *per cent.* With regard to the death-rate, the average death-rate among the registered hospitals was 5·2 *per cent.*, that of St. Luke's 4 *per cent.* So whatever might be said with regard to the position of the hospital, in the heart of London, it could not be alleged to be really unhealthy. With regard to Dr. Thomson's remark on the subject of restraint, restraint was, of course, a very wide term; it might mean almost anything. When speaking of olden times he thought the term should be restricted to restraint as a routine measure. Restraint was unquestionably used to a large extent in St. Luke's, though not to such a large extent as in other hospitals. Only those patients in associated rooms were chained at night, unless in the case of others who were extremely violent. With regard to the abolition of restraint in 1841, he had been through the House Committee minutes, and found that the resident apothecary in those days had to report to the committee at each weekly meeting how many patients were under restraint during the week. For a considerable time afterwards, even up to 1851, there were records of one, two, or three patients undergoing restraint; but it was not carried out as a systematic or routine measure after 1841. With regard to the charity, that was their boast; it was over and above all a charity, and he trusted it would always remain so. More could not be done with the funds at the disposal of the charity than was being done. No case belonging to the middle class, if it were an acute case in poor circumstances, was refused admission.

Gossip about Gheel.⁽¹⁾ By CONOLLY NORMAN.

GHEEL is a well-worn theme on which it is hard to say anything that is very fresh. But circumstances of various kinds have of late contributed to renew general interest in this ancient settlement. The condition of lunacy affairs in our own country is somewhat fluid just now, and the insertion of any foreign object may help to bring about solidification. Finally, I had occasion to revisit Gheel during the past summer. On the whole, when I was asked for a paper for to-day it seemed not unsuitable that I should fall back upon this time-honoured topic.

Gheel, as most of you know, is the principal village of a Belgian district lying nearly due east of Antwerp, from which it is distant about thirty miles. The tract of country in which it is situated has been notorious from the earliest historic times for its barrenness and the worthless nature of its sandy soil. It formed portion of the sterile and arid plain which the Romans called Taxandria, a term expressive at once of the nature of the wood (scrubbed yew trees) with which it was overrun, and of the Roman abhorrence of its desert surface bearing that infernal plant sacred to Hecate.

In later times the country, of which Gheel is nearly the centre, has been known under the Flemish name of Kempenland (in French, *la Campine*); and it retains to this day some of the characteristics which it presented in the time of Tacitus. When the fields fall out of cultivation for a short period they present the appearance of desert, sterile, and sandy wastes, growing little except heath; and as one goes along in the railway train to visit Gheel one is struck by the fact that although it is very low-lying—I am not sure that it is not in parts below the level of the sea,—yet where there is a strip of rough ground beside the railway it is covered with heather and ling. I speak of this very noticeable condition of the earth for a definite reason. The locality has become, in spite of the difficulties which Nature presents, extremely fertile. The minute care in the cultivation of the soil which prevails in almost every part of modern Belgium has here reached one of its highest points, and the desert smiles like a garden. This is due, as the inhabitants and those who write about the subject are never weary of pointing out, to the fact that it is an insane settle-

ment, and that so much profit and advantage accrue to the inhabitants from their originally charitable work of looking after the insane, that they have been thus able to turn their wilderness into a model farm.

Much of the history of this improvement could perhaps be dismissed as traditional, but some at least has been observed in quite modern times. Dr. Peeters, in his charming little tale *Betty* ⁽³⁾ (a romance founded on the facts of Gheel), published apparently about eighteen years ago, talks of the condition of the Winkelom Moor, which lies a little way south of the town of Gheel, forty years earlier, and of the transformation it had undergone since then. He attributes this change to "patient labour," as our familiar phrase is, and praises his predecessor, Dr. Bulckens, for boldly sending out patients to live in the isolated farmhouses which were scattered over the moor. At the earlier period, he says, "the soil was uniformly arid and bare. In many places the sand was so fine that it rose in headlong eddies under the force of the wind, and the seeds sown in it by the hand of Nature dried up and never germinated. In the least barren parts were to be met various specimens of the flora of the moors, the heather blossoms yielding an abundant harvest to the bee. Whin, with its yellow stems, was also found, and aromatic thyme and greenish moss. In the low bottoms, where the heavy rains formed stagnant ponds that dried but slowly, some scattered samples of green herbage were to be seen, and sometimes even the modest corolla of a crowfoot. A few dwarf pines, covered with branches to the roots, ⁽³⁾ and springing from seeds driven before the wind, seemed like lonely sentinels to keep guard upon the moor." People not beyond middle age, he further says, can perfectly remember when more than a hectare (about two and a half acres) of the moor used to be sold for five florins. ⁽⁴⁾ At the time when he wrote he tells us the appearance of the moor had been altogether changed. "A large number of dwelling-houses, built of brick, clean and wholesome, have replaced the cabins of former times. Many herds of cattle browse upon the rich pastures, a host of peasants till the ground, fertilised by their former labours, and bearing an ample crop of rye, of oats, of potatoes, and even sometimes of wheat. Every year the ceaseless labour of the people of the Campine conquers fresh territories from the heath."

I have dwelt upon the reclamation of this Belgian "heather field" in the Campine, I hope not too tediously, because now that we are all occupied with the employment of our patients, now that we all look upon employment as the best medicine in many cases, it is interesting to see how far employment in its earliest and perhaps its wholesomest form has been carried, and is being carried, in the ancient settlement of Gheel. At home we have at least plenty of miserable upland moors growing nothing but bog-myrtle and ling, abundance of low-lying swamps green and yellow with sphagnum, and decorated with no better crop than an occasional mayflower or water crowfoot.

Gheel has, as I am sure my hearers know, an historical and antiquarian interest which is specially strong for us Irishmen. In the middle of the modern village stands the large parish church dedicated to St. Amand, the Apostle of Flanders, which is well worthy of a visit on account of its stalls and confessionals of Flemish oak, probably, I think, carved by Vanbruggen, and, as far as I can judge, little if at all inferior to the famous work of that artist in St. Paul's, Antwerp. But the real centre of Gheel and its district is the Church of St. Dymphna, situated in the outskirts of the village. This is also a very large building, and is esteemed by Belgian antiquarians as one of the most remarkable edifices in the country. The date of St. Dymphna's martyrdom is about 600 A.D., and the church is said to have been first erected on the site thereof early in the twelfth century. Probably not much of the original structure now remains, the church as it appears at present being mostly late Gothic. Of course you will remember that persons of unsound mind in the early ages came to Gheel to worship at the shrine of St. Dymphna, and that from harbouring these poor pilgrims the village and commune began the great settlement for lunatics that we now see. At the west end of the church, close to the tower, there is still to be seen the cell (*Ziemenkammer*) in which the patient was placed on his first arrival. It was provided with a sort of aperture (squinch), through which the patient could see the high altar while service was being celebrated. Over the high altar stands a carved wood reredos of great beauty and interest, dating, I believe, from the late fifteenth century. It is divided into eight compartments, the first six depicting scenes in the life of the

saint ; the seventh, the bearing of her reliques in procession ; and the eighth, which is allegorical, the removal from the skull of a living patient of a little devil. Extremes meet, and in St. Dymphna's Church I pointed out to a very distinguished Scotch physician and lunacy official that this scene perhaps anticipated the operation of trephining for general paralysis, which he seemed to advocate at the Dublin meeting of our Association in 1894. In the ambulatory just behind the high altar, the reliquary of St. Dymphna stands, supported by four stone pillars about four feet from the pavement. The mental invalids who came as pilgrims to the church used to pass between these pillars, underneath the reliquary, on their knees. The reliquary itself is adorned with paintings by a contemporary of Memlinc, inferior of course to the works of that great master, yet recalling the more famous *Chasse de Sainte Ursule* at Bruges. A very valuable early retable (reredos) in the north side chapel is the oldest work of art in the church, but it has no special connection with the church's story.⁽⁶⁾

It is interesting to note the origin of St. Dymphna's relation to the unsound of mind. She was the daughter of an Irish king, who, flying from the incestuous passion of her father, was by him pursued and overtaken at Gheel, where he slew her with his own hand. "Saint Dymphna," says the Rev. M. Kuyl, "who had thus wisely triumphed over the insane passion of her father, was designated by Divine Providence to serve as special protectress against all forms of insanity."⁽⁶⁾ Dr. Alt, of Uchtspringe, who has found testimony in some ancient work that our wicked countryman suffered sometimes from a "consuming melancholy," and sometimes from "frenzied violence," concludes that he was the victim of circular insanity. Father Kuyl's view, however, seems more "up to date," since it appears to imply that abnormal sexual passion is in itself proof of insanity. At least it is clear that the saint's special association with mental illness, as well as her martyrdom, was due to the insanity (the "senseless fury") of her father.

To return from the beautiful traditions of the ages of faith to the more prosaic affairs of to-day: the tract of country which now forms the commune of Gheel is about thirty miles in circumference. It contains some 12,700 inhabitants, of whom about 2000 are insane patients. Following the course of a patient who is sent to Gheel, we first go to the infirmary,

a building about fifty years old, with beds for thirty-five male and thirty-five female patients. It is not only used for the immediate reception of patients on their arrival at Gheel, but also for the treatment of patients suffering from serious bodily illness, or of patients who have, through intercurrent excitement, depression, etc., proved temporarily unsuitable for family treatment. Patients who are deemed permanently unsuitable for Gheel are also kept in the infirmary for short periods until they can be removed to a close asylum. I can remember having seen in this hospital a patient dying of dropsy from Bright's disease; a patient in the last stage of general paralysis (he had put through nearly the whole of his illness in the settlement, having been a quiet demented case); a recurrent melancholic in a state of agitation; and a young maniacal case that was settling down, and was about to be discharged from the infirmary to a family. The last time I visited Gheel I noted that there were but fifteen patients in the female division of the infirmary. The number, however, varies, as may be supposed, according to various exigencies.

The infirmary, as I have said, is not a new building. It has some pleasing features and is beautifully kept, but I am afraid its construction cannot be called advanced from an asylum architect's point of view.

More modern—and, indeed, very good—are the pathological laboratories and museum. This department is one which presents much interest to us at the present time, when we are endeavouring in Ireland to induce the committees of asylums and the Government to see the necessity for a laboratory for the Irish asylums. Gheel is very far in advance of us in this respect, and yet it has but 2000 patients, and one of its claims on public approval is its economy. One member of the resident medical staff devotes almost all his time to pathology, and does excellent work, keeping well abreast of the time in this most important department.

About 270 patients are admitted to Gheel during the year. About two a week, or 100 during the year, are sent in from the cottages for treatment in the infirmary. There are six resident medical officers, including the physician and director, Dr. Peeters.

When a recently admitted patient, such a one as the maniacal case mentioned in a preceding paragraph, has been

under observation for a little time in the infirmary, and when a suitable location has been found for him, he is sent out into family care with a householder in the neighbourhood. Some live in the town, some in the adjacent villages, some in solitary houses in the country. The people with whom the public patients live are shopkeepers, artisans, and peasants, and the patients share the various occupations of their hosts. On the two occasions on which I visited Gheel I enjoyed opportunities of seeing a large number of patients. The first occasion was at the time of the meeting of the Congress for the Care of the Insane held at Antwerp in 1902. The Congress visited Gheel in a somewhat ceremonious way. We were received with distinction and hospitality, and those who were musical were charmed to listen to the cantata of "St. Dymphna," which was rendered by a great chorus in the market-place. I then saw most of the patients and their dwelling-places in the town, and I was highly pleased with the appearance presented by both, and with the wonderful air of contentment of the patients. Again I visited Gheel this year, but I determined to go without notice or preparation, when the settlement could not be said to be "on show," and when I could see anything I chose in my own way. Accordingly I wrote to no one, and brought with me a courier who knew Flemish and Dutch as well as French. Luckily I did so, for Dr. Peeters was away, and the Gheelois generally are not multilingual. I drove round the outlying villages and houses where the patients were. Through the kindness of Dr. Boekmans I was afforded every facility. I was chiefly anxious to see the patients in single farmhouses, and I saw a number of these along with some of the villagers. On the whole, the favourable impression which I formed in 1902 of the condition of the insane in the colony was confirmed by what I saw in 1903. I found the country patients very comfortable. They lived in rooms better than those inhabited by their hosts, and they were better clothed on the whole. Many of the rooms, it must be admitted—and this is apt to be objected to by the English visitors,—had tiled floors, but we are so familiar in this country with brick or tile in their unbaked condition forming floors—in other words, with mud floors—that I felt I could not quarrel with the floors of these houses made of excellent tiles. A number of patients were working in the fields, and of these the clothes,

I confess, were generally rather soiled, but it was with good honest clay, while the patients' garments seemed warmer than those worn by their hosts ; and as the weather was somewhat cold, it being late in the autumn, they wore stout neckcloths. The patients' clothing and the furniture of their bedrooms are supplied by the administration. Definite rules are laid down as to quantity of clothing, bedding, and so forth. Lay inspectors are specially appointed to look after these matters, visiting the patients at least once a week, and seeing their clothing, bedding, etc. Besides the more essential articles of bedroom furniture, which were sufficient and good, it is also provided in most cases that there should be a curtain to the window. In almost all the rooms which I was in there were pictures on the walls.

A man who had lived in a farmhouse near an outlying village for over thirty years struck me exceedingly. He slept on the ground story in a room which had, it is true, a tiled floor, but was very comfortable. The walls were decorated with the usual sacred pictures, which I saw, I may say, everywhere ; there were also photographs of his children, grown-up men and women, and grandchildren. He showed me his grandchildren with great pride. His speech, a compound of Flemish and Dutch, I could not understand much of. It was obvious, however, that he was delighted with his numerous progeny. He insisted on taking me by the arm and leading me from his bedroom across the common room, to show me the cowshed. It contained eight cows. It is hard to say whether he was most delighted with his grandchildren or with the cows kept by his host. The house was constructed on lines that seem common in the smaller Belgian farmsteads. The whole edifice resembles in section the broken-backed initial A that you will see in the *Nuremberg Chronicle* and elsewhere. A vertical dividing wall, generally well on one side of the centre, divides the entire floor space, and on one side of this wall is the cow byre ; the common room lies on the other, and beyond this, again, are the bedrooms. The arrangement secures that the homely odour of cows and their belongings is constant and strong. Vaccine odours are not peculiar to Belgian farmhouses ; they prevail in many much frequented Swiss and Bavarian villages, and even at home if you happen to live next to a cattle lair, as I do. Happily they are said not to be insalubrious.

There are some other features of Gheel which have attracted

unfavourable comment, just and unjust. Englishmen, not content with reflecting on the tile floors of the rooms on the *res-de-chaussée*, damn the almost perpendicular stairs that often lead up to those bedrooms which are on the first floor. Unless in the case of epileptics or others who are liable to injury, there is no more in the one point than in the other. The luxurious arrangements of an institution are not to be had in family care, but there are compensations. A more serious question is whether it is right to place any of the epileptic insane in family care. Personally, I incline to think not. Again, I can hardly imagine any circumstances under which it is wise to place public patients of that class whom the French charitably call *faible* in family care—unless, indeed, in the care of their own immediate family, and even then but rarely. Speaking generally, no cases need more the unremitting attention only to be secured in a hospital for the insane.

The whole impression, however, produced upon my mind by what I have seen of Gheel corroborates that of many other observers: of Baron Mundy, who lived there for three months to study the system; of Dr. Alt, who can say that his experience is not founded on mere flying visits paid in summer weather, but who has visited Gheel at every season and under every circumstance; of the founders of the settlements at Lierneux, in Belgium, and at Dun-le-Roi, in France, who have been bold enough to imitate Gheel under new conditions, and with great success; and of many others who are endeavouring all through Europe to introduce or extend the system of Gheel with such modifications as local conditions may require. A curious proof from within Gheel itself that family care is more widely applicable than used to be supposed is furnished by the fact that the Dutch Government have sent to Gheel a number of their patients. A little Dutch chapel has been built there for their use, and a Dutch Lutheran minister is in residence and looks after their spiritual wants. In a house which I visited close to Gheel two patients were living, a Dutch patient and a Flemish patient, apparently in perfect harmony with their Flemish hosts and with each other.

I will not delay you by adding to my rambling remarks any fiscal details. It is sufficient to say that family care has been found economical at Gheel, as at the other great Belgian settlement (Lierneux), as in France, Germany, Scotland, and, indeed,

wherever it has been tried. At Gheel not only is there the economy of dispensing with costly asylum buildings, but, although the amount paid by Government for maintenance is less than in the close asylums, yet the margin between the money received and the money expended has been sufficient to build the infirmary, the laboratories, bath houses, residences of certain officers, etc., and still to leave a decent credit balance.

It has never been the economic aspect of Gheel that has specially interested me; though speaking in a poor country, and in one where the overcrowding of our asylums causes serious monetary as well as medical trouble, one is glad if one can point to any economy. But the real matter of importance to us is that family care presents a method of dealing with the insane which is feasible in a great number of cases, which is curative in some, which is improving, tranquillising, and humanising in very many, and which in suitable cases, even where improvement is not to be expected, is more free, happy, and wholesome than existence in an asylum ever can be. I have said there is a compensation for the absence of asylum luxuries. When can an asylum be home-like to the poor? It needs to be handsome if it is not to present the unutterably dreary and demoralising desolation of an Irish workhouse ward, than which no more melancholy form of habitation has been occupied by man since the days of the cave-dwellers. But the handsomer and the brighter you get the great precincts of an asylum, the further you are from home. Home surroundings have an educative, a supporting, a calming effect. An asylum is, as of course we know, for a great number of our poor people a necessity. But there are cases where it is not indispensable, and in such cases we must remember that the rigid discipline, the unvarying routine, the monotonous and uninteresting life of an asylum can do harm. Seeing that too strict a discipline, deprivation of all initiative, and absence of interest in anything beyond a narrow circle have been accused of producing partial dementia in certain gallant men outside our institutions, we can hardly doubt the possibility of an "asylum dementia." Take the old man I spoke of a little while ago. His pictures and his photographs, and the little trumpery odds and ends about his room, flattered that sense of property which we all enjoy, and his sympathies were roused for the rustic belongings of his host as well as for his own family por-

traits. There is an element of human happiness about all this which is lacking in asylums. This human interest kept him alive—body and mind. He would probably enough have been a very dull old dement in an institution. Again, the same may be said of many of the female patients whom one saw in Gheel sitting on the doorstep with their hostess's children in their arms. Looking after the children seemed to be a very common occupation for the women boarded out in Gheel, and if a woman can be trusted (and the mothers appeared to trust these patients entirely), what occupation is there for a woman to be compared to it? What can an asylum offer at once so congenial and so calculated to keep alive the intelligence and the feelings of a woman?

It goes without saying that the patients who are sent to Gheel are selected. The homicidal, the suicidal, the continuously turbulent, and those who are liable to offend against public decency are excluded under the regulations. I think that these regulations should be made even more strict than they are. Untoward occurrences are of extreme rarity. They would perhaps be even more rare if the ideal arrangement could be obtained (as it easily could under slightly different conditions), and if no patient were sent to an insane settlement until he had been under expert care for some considerable time, and his case had been thoroughly and individually studied. This can best be effected where a settlement is established around and in connection with an ordinary reception asylum or insane hospital. Of the patients sent to Gheel, about 17 *per cent.* are found unsuitable for family care, and are sent directly to close asylums. Individual study of cases and minute knowledge of their personal peculiarities are the essential conditions for the beginning of family care. Attempts to treat patients wholesale or according to the names that somebody claps upon their diseases, can only end in disaster here as everywhere, but here the disaster will be more notorious.

We are often told that family care is fraught with danger, fraught with difficulty, is practically unworkable, and so forth. I answer, *solvitur ambulando*—behold Gheel. I am then told, or used to be told—nay, I have said myself, but it was a great many years ago,—that Gheel is inimitable, having been founded in the piety of primitive ages, and being inhabited by a population among whom care for the insane had become something

approaching to an hereditary tact. Again, however, *solvitur ambulando*; Gheel has been equalled, in some respects surpassed, by the modern settlements at Lierneux and at Dun-sur-Auron, while family care has been established at numerous centres in Germany, in Russia, in Holland, and in Italy.

Viewed with regard to the question of extending the insane settlement or other form of family care to fresh countries, these modern examples—I am ashamed to say I am only personally acquainted with Lierneux—are no doubt the most instructive; but all must yield in general interest, in what I might call personal charm, to old Gheel, where family care was first practised on a large scale, where by the reforms of the last century family care was first systematised, and where the path of modern progress is illumined with the beautiful traditions of the past. *Floreat semper.*⁽¹⁾

⁽¹⁾ Read at the Quarterly Meeting of the Irish Division, held at Swift's Hospital, Dublin, November 13th, 1903.—⁽²⁾ Written originally in Flemish and translated into French. The French edition, which I have, is undated, but references in the preface seem to show that it was published in 1885 or 1886. When Dr. Peeters is asked about this little work, he, with his accustomed modesty, disclaims literary merit, and says he merely wrote it for the instruction of his people. It presents an interesting picture of his ideal of the insane patient in family life.—⁽³⁾ A sure sign in that country that the tree was not under human cultivation.—⁽⁴⁾ The Dutch coinage was then used in Belgium. Twelve florins equal £1 of our money.—⁽⁵⁾ A full and well-illustrated account of this fascinating edifice is to be found by those who can read Flemish in *Gheel in Beeld und Schrift* (i. e., Gheel in Art and Literature). It is much to be regretted that this work is not reprinted in French, so as to be accessible to a larger public.—⁽⁶⁾ *Gheel vermaard door den dienst der H. Dimpfna*, Anvers, 1863. I quote at second hand through Dr. Peeters.—⁽⁷⁾ I must here gratefully acknowledge my obligations to the articles of Dr. Alt, *Das Heutige Gheel*, published in the *Psychiatrische Wochenschrift*, Nos. 1 to 4, 1899. They contain the best account of Gheel as it is to-day, and are very full, eminently fair, and friendly with the friendliness of an impartial foreign expert.

DISCUSSION

At the Quarterly Meeting of the Irish Division, held at Swift's Hospital, Dublin, November 13th, 1903.

Dr. NOLAN, in the course of some remarks on Dr. Norman's paper, said he had visited Gheel and Lierneux, and it had struck him that the standard of living was simpler and lower all round than that of Ireland. Although he had not come to all his conclusions about Gheel, it raised in his mind the whole question of the treatment of the insane. The people of Ireland were not as unsophisticated as those of Gheel, and the system might not work so well, but he held that a few colonies might be laid down, though he did not think that the idea of getting trained married attendants to board patients out, and so train the people of the district around, would work. The mental condition of the patients at Gheel, with one or two exceptions, did not strike him as being any happier than that of those in asylums. Knowing the country, north and south, he did not think the system would be so successful in Ireland as at Gheel.

Dr. MILLS thought that as many as 10 *per cent.* of patients in Irish asylums are capable of being dealt with by home treatment, and advocated its adoption,

especially as the public were against further expenditure in the matter of asylums.

Dr. DRAPES said that on the whole patients were better off in asylums than in the best managed colony, though in some cases the home treatment was beneficial.

The CHAIRMAN (Dr. LEEPER) wanted some explanation of the different methods which seemed to prevail in Belgium. He had visited an asylum near Brussels not long ago, and found something very different from Dr. Norman's rosy picture of Gheel. It was an asylum for 500 State-supported patients, situated in eight acres of ground, to only one half of which (four acres) the patients had access. It was apparently devoid of any sanitary or sewerage arrangements. As Dr. Leeper approached it he was assailed with such a noisome stench that he became quite ill. The gentleman who received him, but who refused to show him the wards and patients, affirming the convenient reason that the Government would not allow it, appeared to be the non-medical proprietor. He gloried in the free use of restraint (strait-jacket, etc.), and ridiculed the English notion of non-restraint, which he called "the system of the broken ribs." He likewise sneered, "I suppose your Commissioners give you notice when they are coming." Turning to the methods spoken of so favourably by Dr. Norman, the speaker said that he did not think liberty and open air would bring about cure without skilful and methodised treatment.

Dr. NORMAN, in reply to Dr. Nolan, said that the fact that family care could be adopted was obviously true. *It had been adopted.* He did not see why they should start with the supposition, which he thought underlay a good deal of the arguments against boarding out, that an asylum was absolutely necessary for every stage of every case. Old patients at Gheel were visited at least once a month by one of the medical staff, and recent cases not less than once a week; cases of bodily ailment or acute excitement daily, or several times a day. Hence, and with the aid of the infirmary, the patient could receive any definite mode of treatment. There were certain classes, in his opinion, not suitable for boarding out, *e.g.*, epileptics. Dr. Leeper has drawn our attention to the asylums in Belgium; they are badly managed because in private hands and under no supervision. The question of the education of the people to care for the insane was important. In Germany and in South Austria the plan of boarding out patients with married attendants has been adopted. As far as he had seen, the patients were well cared for in Gheel, and though, as Dr. Nolan said, the standard of living might be different from here, still that did not affect the question. With regard to finance, whether family care would pay in Ireland could hardly be said until the attempt was made.

Dr. NOLAN wished to remove the impression that he was against the scheme. He reiterated his opinion that the attempt ought to be made, and believed the system in Ireland would be similar to that now existing in Scotland—to his mind, not ideal.

Dr. NORMAN said that he thought the system in Scotland laboured under the difficulty of insufficient care. Patients should not be left to the necessarily insufficient care of relieving officers and parish doctors. If family care were adopted in Ireland it would require very much closer supervision.

The Relationship of Wages, Lunacy, and Crime in South Wales. By R. S. STEWART, M.D., D.P.H., Deputy Medical Superintendent, Glamorgan County Asylum.

THE conditions of life of the whole community in the county of Glamorgan, the staple industry of which is that of coal, in which 17 *per cent.* of its population are directly employed, are subject to modification through the influence of an arrangement

known as the sliding scale, by which the wages of the colliery operatives are determined in accordance with the selling price of that commodity. This scale has undergone several considerable fluctuations in the past twenty-eight years, and these fluctuations have been productive of consequences of no small sociological importance.

It is to be observed that in 1879, when wages were at the lowest point, this county had a lunacy-rate, judged by the ratio of admissions to its asylum to population, approximately one half of that prevailing in the country generally. Since that year this ratio has shown such a generally upward progression that now the rates for Glamorgan and for England are very nearly identical. In other words, the rate of increase has been enormously greater in this county than elsewhere.

The next point to be noted is that the progression has not been uniform; that variations occur from year to year which not only have no correspondence with the variations taking place in the country as a whole, but are frequently in a diametrically opposite direction, and which therefore must be determined not by general, but by local causes; and that there has been a certain parallelism between wage-rate and lunacy-rate. There are two sliding scales, that of wages and that of lunacy, going hand in hand. Whenever wages rise there is a concomitant increase of insanity, and *vice versâ*, but the fall is never commensurate with the fall in wages, and hence the steady upward movement in insanity which is observable.

One other association is to be remarked, and that has reference to the amount of energy expended by the workmen, as estimated by the output of coal per man. Whenever wages are low the output is high, and conversely a high wage is associated with a diminished output. This implies that in what are called "good times" the operatives work less and earn more, that their spending power is greater, and the leisure wherein to spend is also greater, a condition of affairs which may be held to apply to the community in general. What is the result? It seems impossible to get away from the conclusion that these two conditions are powerful factors in the production of insanity.

Perhaps the most important symptom of insanity is impairment of inhibitory power, and this loss of self-control is evidenced in another direction, *viz.*, in the excess observable

in the use of drink. The position of Glamorgan, where, it is to be noted, the Sunday Closing Act is in operation, in regard to drunkenness is deplorable, the ratio of persons tried for that offence being twice what it is in England; and here also a similar parallelism is to be observed, and to some extent also in the case of serious crime.

Generally speaking, a falling wage-rate, greater expenditure of energy, and lessened leisure are associated with a decrease of crime and drunkenness and with diminished lunacy. A rising wage-rate, diminished labour, and increase of leisure are associated with increase of drunkenness, crime, and lunacy.

How is such a state of things to be reconciled with the lately expressed opinion that "insanity is, and ever will be, the product of two factors, stress and heredity"? So far as heredity is concerned, there is, it may safely be affirmed, no county in the whole kingdom in which this factor operates less than in the county of Glamorgan, and as to stress in the ordinary sense of the term, the argument is all the other way. What was the effect of the stress which was the accompaniment of the prolonged labour dispute in the South Wales coal-field in 1898? A very marked drop in the prevalence of drunkenness and lunacy, in striking contrast with the continued increases prevalent in the country in general. Stress should be recognised as being of two different sorts, productive of totally opposite results. There is the chronic, never-ending variety, which is undoubtedly a most powerful factor in inducing mental breakdown, and which is to be found in all likelihood in its most aggravated form among the poorer communities of London and other large cities. It may also play a part in the production of insanity in the purely agricultural counties, where high proportions of pauperism and lunacy are found to co-exist habitually, but there cannot be said to be much real strenuousness of life in such communities, and heredity, arising from stagnation of population and the withdrawal of the fitter specimens of the people to other and more promising fields, is more probably the chief agency in the production of such an excessive ratio of lunacy as exists in these parts. The habitually lower pauperism-rate of 26·6 per 1000 in Glamorgan, which contrasts with the enormous one of 40·6 in Hereford, is sufficient evidence that this chronic distress does not prevail among the industrial classes connected directly or indirectly with the

coal industry. Rather is it increasing material prosperity that is found there, and found, too, in association with a disproportionately increasing prevalence of lunacy. For every sixty of the general community who ten years ago became insane, sixty-nine now succumb; whereas in the case of miners, the forty-one who broke down ten years ago have now become fifty-one. The other variety, acute temporary stress, has, on the other hand, a bracing tonic effect, and is accompanied by evidence of increased self-control.

The deplorably deleterious effect of the combination of high wages and lessened labour, or, in other words, of increased spending power and increased spending time, is brought into very striking prominence by the fact that in the first half of the period 1875—1902 an average wage-rate 10 *per cent.* above the standard of 1879 is found in association with a drunkenness-rate in Glamorgan of 835 and a lunacy-rate of 31 per 100,000; while in the second half a wage-rate 32 *per cent.* above the standard goes along with a drunkenness-rate of 1119 and a lunacy-rate of 45. Put otherwise, an increase of the wage-rate over the standard of 22 *per cent.* has as its concomitant an increase of the lunacy-rate equivalent to 14 per 100,000, that for the country as a whole in the same period being only 8, and an increase in the drunkenness-rate equivalent to 284 per 100,000, that for England and Wales showing, on the contrary, a decrease of 90.

Whether the generally admitted increased material prosperity of this country has been conducive to improvement in the physical and mental status of the nation is matter of doubt. The question of the national physique is one which is at the present moment occupying a large share of the public attention. The Inspector-General of Recruiting, the Director-General of the Army Medical Service, and General Maurice, lament the deplorable falling off of material for the army. The report of the Scottish Commission on Physical Education reveals a most lamentable unfitness in those who are destined to be the parents of the next generation, and in response to urgent demands in both Houses of Parliament, a Commission has been appointed to make investigation into the alleged physical deterioration of the nation. It cannot be said that the state of affairs in the busy industrial district of Glamorganshire is indicative of any real true progress towards physical, mental, or moral excellence,

but quite the reverse. The raising of the standard of material comfort, it is evident, is—if unaccompanied by an improvement in the existing unwisdom prevalent among industrial communities and in the lack of facilities for healthful recreation—not only not helpful, but is positively productive of the most detrimental consequences immediate and remote. History, it has been said, is an eternal repetition, and here once more is an illustration of the people perishing for lack of knowledge—perishing only all the faster because this lack is ably assisted by increased facilities for what by curious and pernicious tradition is commonly regarded as pleasure and enjoyment.

Year.	Wages.	Output.		Insanity.		Crime.			
	Percentage above standard of 1879 in South Wales coalfield.	In tons per year per man over and under ground.		Proportion of admissions into asylums, etc., per 100,000 of population.		Proportion of indictable offences known to the police per 100,000 population.		Proportion of persons tried for the offence of drunkenness per 100,000 population.	
		United Kingdom.	South Wales.	England and Wales.	Glamorgan.	England and Wales.	Glamorgan.	England and Wales.	Glamorgan.
1874	—	—	224	—	—	—	—	—	—
1875	22'50	—	—	51'7	35'6	—	—	848	970
1876	14'00	—	—	52'7	32'1	—	—	843	902
1877	14'00	—	—	52'5	29'6	—	—	815	880
1878	10'00	—	—	53'3	31'8	—	—	777	739
1879	0'00	—	267	51'6	25'6	—	—	703	675
1880	4'58	—	—	51'5	26'0	—	—	672	784
1881	6'66	—	—	51'8	34'3	—	—	669	823
1882	12'91	—	—	51'7	36'3	—	—	718	876
1883	15'41	—	—	54'3	31'5	—	—	720	884
1884	17'50	—	—	53'1	30'0	—	—	730	877
1885	13'75	—	—	49'0	27'4	—	—	673	901
1886	7'50	—	—	49'3	29'6	—	—	600	772
1887	2'91	—	299	51'4	29'9	—	—	584	808
1888	3'33	—	—	52'5	34'5	—	—	591	808
1889	17'08	—	—	52'9	32'1	—	—	612	842
1890	43'64	—	—	56'3	36'2	—	—	659	919
1891	55'83	—	257	57'4	43'2	—	—	644	1037
1892	36'14	—	—	58'3	38'5	—	—	591	975
1893	15'00	—	—	60'0	38'2	290	317	567	1040
1894	25'10	277	270	58'8	37'2	285	331	594	1287
1895	16'77	283	264	60'9	44'1	267	350	556	1085
1896	11'04	294	273	60'7	42'8	255	337	608	1265
1897	10'94	303	282	60'7	50'4	253	337	620	1258
1898	15'55	297	209	61'5	45'5	261	307	642	936
1899	23'95	314	302	60'8	52'1	238	267	672	1245
1900	53'23	300	268	61'8	52'3	241	272	633	1237
1901	73'33	281	260	64'0	63'6	248	280	645	1273
1902	53'12	285	268	69'3	59'6	252	305	636	1276

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In 1893 a change was made in the style of the tables of "Criminal Statistics," and for the period prior to that year the numbers in columns 8 and 9 are compiled from "Offences determined summarily," given in Table 7 of these Reports.

For their kindness in supplying me with information I beg to acknowledge my indebtedness to the Home Secretary; to Mr. Dalziel, Secretary of the Monmouthshire and South Wales Coal Owners' Association; Mr. Ballinger, of the Cardiff Free Library; and Mr. A. Capel Shaw, of the Birmingham Central Free Library.

Clinical Notes and Cases.

Clinical and Pathological Notes.—II. By Dr. M. J. NOLAN, Resident Medical Superintendent, Down District Asylum, Downpatrick.

CASE 5. *Microcephalic idiocy; epilepsy; cerebral asymmetry; microgyria; ulegyria; scalp suggestive of atavism.*—H. C—, æt. 41 years, admitted to asylum from a workhouse August 4th, 1902; died of epilepsy December 22nd, 1902. No previous history obtained.

His physical appearance would have rejoiced the heart of an evolutionist, as *primâ facie* he was a perfect specimen of the Simian type. His dwarfed figure was bent forwards; his coarse grinning face seemed to protrude from between the misshapen spreading ears. The small receding skull was encased in an ill-fitting scalp, on which the rough black hair grew in ridges. He progressed by means of a side shuffle, preserving his equilibrium by spreading out his elongated forearms. He gave vent to meaningless spasmodic grunting sounds. In personal habits he was most depraved, showing an absolute disregard of the calls of nature. His voracious appetite was apparently gratified by the ingestion of any material. There was nothing calling for special comment in the nature of his epileptic seizures, which were frequent and severe. He was deaf and dumb. Beyond grabbing clumsily in the neighbourhood of his genitalia, he gave no indication of sexual feeling. An examination as to his mental faculties had an almost negative result. He could not

be said to possess any one of the intellectual faculties except in the most rudimentary degree. Hence in describing his appearance it was stated he was *primâ facie* of Simian type, but his intelligence was infinitely below that possessed by the ordinary anthropoid ape. He proved clearly the force of Dr. Ireland's contention that the intelligence of a monkey is very different from that of an idiot—the gauge of the Simian intellect cannot be reached by merely deducting so much from the human. H. C— was as far below the intellectual level of the average ape as the latter is inferior to the highly developed specimen ⁽¹⁾ at present the delight and wonder of a London music hall, where, in spotless regulation garb, he discusses with evident appreciation and discrimination the elaborate *menu* set before him. H. C—, if placed before such a meal, would have brought his voracious appetite to play not alone on the viands, but on the napery, glass, and cutlery, and by preference would probably try the latter as a *hors d'œuvre*. During his period of residence here it required the undivided attention of the attendants to prevent him from eating filth and garbage, and otherwise unwittingly endangering his life by senseless acts.

Post-mortem examination.—The general condition of the organs called for no special remark. In the **stomach**, however, was found a ball of ingested material, mainly consisting of coarse mattress fibre. This mass, which simulated the shape of the stomach, showing very distinctly a greater and lesser curvature, weighed 10 oz. It lay quite free from attachment to the walls of the viscus, and its presence therein did not seem to have given rise to any inflammatory condition, though it must have been there many months, as the patient had no opportunity of obtaining the fibre in the asylum. [The mass was shown.]

The scalp, as already indicated, was abnormal,⁽²⁾ rather loose over the skull; the hair arranged in rough ridges running in the sagittal direction, an arrangement giving him the appearance noted in some Carnivora. A portion of the scalp is now shown (see Plate I, fig. 1), also microscopic preparations of it; and an examination of each tends to confirm the theory which regards the condition as the possible result of a retrograde development rather than of a simple "hypertrophied scalp," *i. e.*, one which had been designed to cover a full-sized skull. I would invite special attention to the slide showing the section, which was prepared by my late assistant, Dr. J. H. Thompson, who found

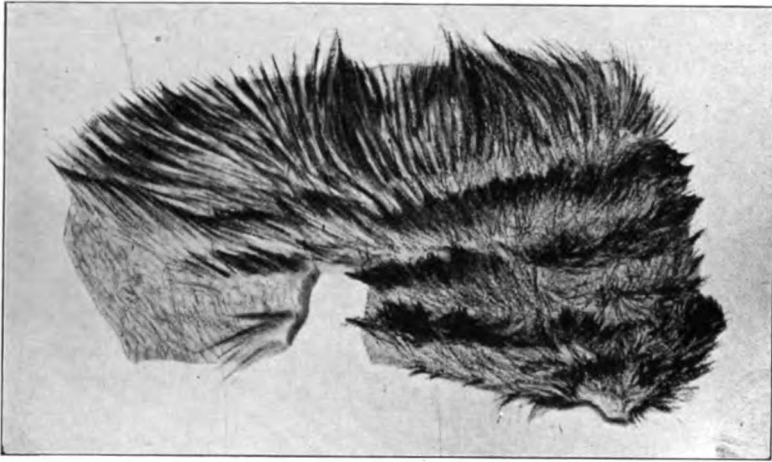


FIG. I.

Portion of Scalp of H. C., Microcephalic Idiot, Aet. 41 years, showing hair arranged *à la Carnivora*; the ridges run parallel to Sagittal Suture.

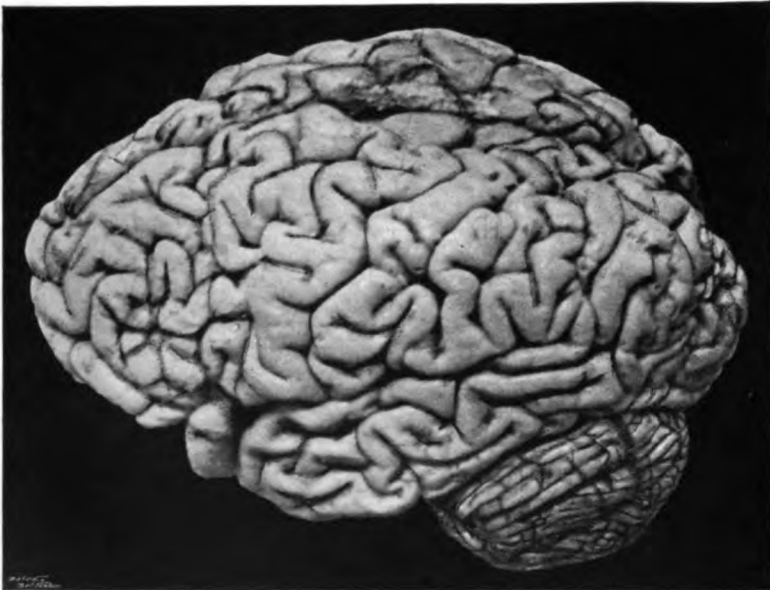


FIG. II.

Lateral View of Brain of H. C., showing Microgyria, Ulegyria, and shrinkage of left hemisphere, particularly in frontal lobe.

TO ILLUSTRATE DR. M. J. NOLAN'S PAPER.

much difficulty in making the preparation owing to its extreme toughness. His effort, however, has been fairly successful, and has the merit of novelty, as Dr. Ford Robertson states no sections of abnormal scalp have been made so far as he is aware.

The skull at first sight presented no marked abnormality beyond its small size and exaggerated asymmetry, the left side being smaller than the right. Synostosis was complete. A close examination revealed, in addition to the usual characteristics of a microcephalic skull (sloped narrow frontal bone, deep temporal fossæ, narrow ethmoidal fossæ, prominent occipital condyles, large frontal sinuses, prognathous facial bones, narrow dental arcade), small areas corresponding to the frontal eminences, showing many depressions which caused a porous appearance. To this area on either side the dura was somewhat adherent; in the same manner the arachnoid was adherent to the dura by a cribriform arrangement; a villous growth covered it, to an extent corresponding to the site of the porous osseous areas.

The brain.—Seen *in situ*, the asymmetry of the cerebral hemispheres was at once apparent. An abnormal disproportion between the cerebrum and the cerebellum was also evident, the latter being unduly large in its relation to the former. When removed the organ weighed only 29 oz.

The convolutions of the left hemisphere presented a vermiciform appearance; the sulci gaped and receded; the convolutions seemed to be contorted into numerous small gyri, each convolution being diminished in size, so that the complex condition of microgyria and ulegyria existed; the erosions on the surface, and the cicatricial indurations which characterised the latter, being well marked (see Plate I, fig. 2).

Fissures.—The fissures of Sylvius and Rolando were normal in direction and relatively in size, but in each hemisphere the Rolandic fissure commenced at a point posterior to the middle line of the longitudinal fissure, with the result that the frontal lobes were abnormally large. Only about three eighths of the parieto-occipital fissure was visible on the external surface.

Left hemisphere.—Frontal lobe: Ascending frontal convolution fairly well developed; superior and middle convolutions normal in position but badly formed; inferior convolution much atrophied, the gyri in consequence gaping and very irregular. Parietal lobe: Ascending convolution, like ascending frontal convolution, fairly well developed, but at upper end showed

tenuity. Superior parietal lobule cramped, atrophied, and irregular; first annectant gyrus well marked, as were also both divisions of inferior parietal lobule. Occipital lobe: Convolutions small and irregular. Owing to atrophy and recession of the gyri in the anterior part of the lobe there was a marked constriction, which threw the occipital portion into prominence. Left temporo-sphenoidal lobe: Superior convolution much wasted, with consequent gaping of the sulci. Middle and inferior convolutions below normal development.

Right hemisphere.—Frontal lobe: Ascending convolution well marked, while remainder of lobe was pretty clearly differentiated by the precentral and inferior and superior frontal sulci into the three frontal convolutions, all of which were well developed. Right parietal lobe: Convolutions and sulci normal in position, and, as compared with corresponding region on left side, were well developed. Right occipital lobe: Middle convolution particularly well developed. All the divisions of this lobe showed their connections with parietal and temporo-sphenoidal lobes, by means of the different annectant gyri, very plainly.

Remarks.—This case of genetous idiocy is an excellent illustration of the anomalous conditions which give rise to true microcephaly, as well as to those pathological changes to which developmental errors in structure render the fine organisation of brain tissue and brain function peculiarly liable. Clinically, a case of primary essential amentia may not be particularly attractive; yet the pathological investigation of such cases is fascinating to those interested in the study of brain as the organ of mind. It is satisfactory to find that recently, both at home and abroad, fresh interest has thrown much new light on the fundamental errors which produce this and allied conditions, and if we cannot cure idiocy we may at least learn the lesson of its ills. It has been truly said, though *not* by an Irishman, "that the great majority of imbeciles and idiots now living should have been treated three generations back." We must agree in the truth of the observation, and so by a more minute study of those unfortunate creatures who find their way into our asylums—

"Their heads sometimes so little, there is no room for wit;
Sometimes so long, there is no wit for so much room"—

we may lay the scientific foundation of such preventive measures as may tend to diminish the number of idiots and imbeciles three generations hence.

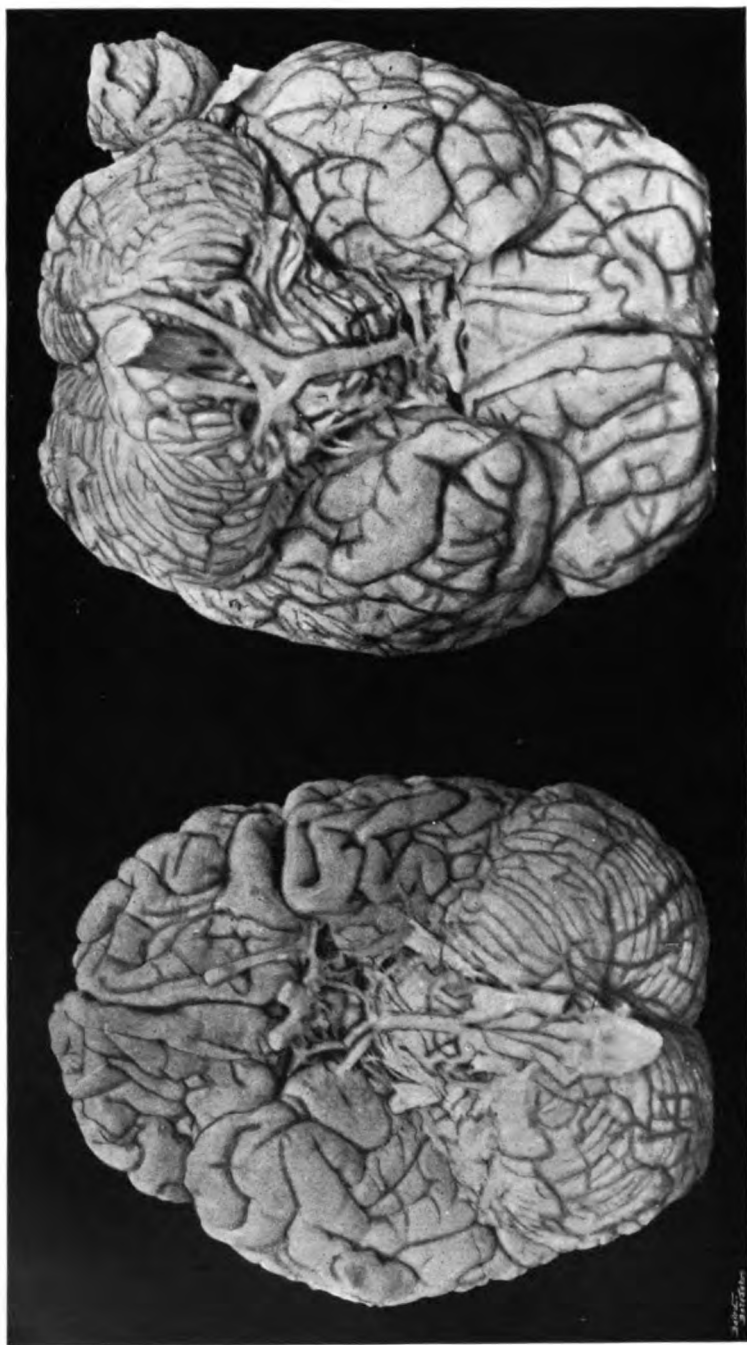


FIG. I.

Brain of H. C., Microcephalic Idiot, Aet. 41, showing
Microgyria and Asymmetry.

FIG. II.

Brain of — M.C., Senile Dement, Aet. 93, showing Tumour
springing from Tentorium-Cerebelli.

TO ILLUSTRATE DR. M. J. NOLAN'S PAPER.

CASE 6. *Senile dementia with vestigial delusions of erotomania; tumour of the tentorium cerebelli; ovarian cystoma.*—M. M. C—, a married woman of alcoholic habits, had her first attack of mania at the climacteric. She was then admitted to Belfast Asylum, was transferred to this asylum on November 16th, 1869, and died therein on April 14th, 1903, æt. 93.

From the available history of the case it would seem that at the onset of her mental disease she suffered from acute mania, marked by eroticism and delusions of great wealth. For very many years before the end she suffered from senile dementia of the ordinary type, but now and again she babbled of her wealth, and stated in automatic manner "that twenty-nine beautiful young men had built a castle for her; that she gave each a guinea a day and a jar of drink." She sometimes affected the coyness of maidenhood; at other periods she indulged unblushingly in erotic allusions, her conduct very often being refractory. Generally she was quiet and clean in her habits, and though she suffered from mitral valve disease, with emphysema of left lung, together with a large abdominal tumour, she was able to get about the house and grounds up to within a few months of her death. She never complained of headache or other pain; she had no paralysis or paresis, and no special sense disease.

The *post-mortem* examination confirmed the diagnosis as to the condition of her heart and lungs, and cleared up the nature of the abdominal tumour, about which there had been some doubt. It also revealed an unsuspected intra-cranial tumour, which had never given any indication of its presence by any obvious symptom or sign. On removing the calvarium it was noted that the skull was abnormally thin, and that a tumour was springing out between the right cerebral hemisphere and right lobe of the cerebellum (see Plate II, fig. 2). On removing the brain this tumour was found to be the size of a walnut; it was embedded between the folds of the tentorium cerebelli, and in a position to partially occlude the lateral sinus. The abdomen when opened was found to be almost entirely filled by a large tumour of smooth and glistening appearance, greyish in hue, and marbled over by numerous branching blood-vessels. It exercised great pressure on the intestines and other organs, particularly the left kidney, which was atrophied by compression; the right had taken on a compensatory hypertrophy. When

removed the tumour was found to be an ovarian cystoma, containing some 12 pts. 8 oz. of a turbid fluid, sp. gr. 1000, in one large cyst. The base commenced in the parovarium on right side, and had stretched across the pelvis. The uterus was movable and normal.

Remarks.—The advanced age of the patient is of interest in view of her many and serious diseases. When she first came under the reporter's notice, some ten years before her death, she seemed wonderfully agile for a woman over eighty years of age and suffering from a multiplicity of disorders. Operative measures regarding the abdominal tumour were then considered, but set aside in view of the condition of her heart and lungs, which gave trouble each winter. The treatment was then directed to the betterment of the pulmonary and cardiac complications; and the constipation was relieved by regular administrations of aperients. The tumour seemed to remain stationary as to size.

The association of physical disease of the reproductive system with erotic delusions (persisting in this case into the dementia of extreme old age) is noteworthy. Some years ago, when making a *post-mortem* examination of another senile dement (who died of secondary cancer of the liver following primary cancer of the breast, which had been removed two years before), the left ovary was found to be the seat of a dermoid cyst. The patient was a demented old woman, but she was subject to very erotic outbursts, and described what she regarded as her sexual charms in very glowing language.

When in the Richmond Asylum the writer observed a young girl who died of acute lung trouble and double pyosalpinx. Her mental state had been characterised by a sexually perverted inclination towards the nurses, whose footsteps she literally licked and kissed when they evaded her erotic overtures.

The intra-cranial tumour is of interest, showing how little obvious disturbance may result from such a considerable growth, forming so great an obstruction to the free blood-current in the lateral sinus. From its position it must have retarded the passage of the venous blood, producing passive chronic congestion of the brain, resulting in mal-nutrition of a large area. A like pathological condition must have existed in the skull itself by reason of the obstruction to the veins from the diploe,

and this probably accounts for the tenuity of the bones. Likewise the scalp suffered, and in this connection it may be noted that for a woman of her great years her hair was very luxuriant, and not entirely grey.

The sections of the tumour show it to be largely of a sarcomatous character, with several concentric bodies, some of which would seem to be of a psammomatous nature.

CASE 7. General paralysis; syphilis; Pott's fracture, with repair ten weeks before death.—W. H. T—, æt. 40, with a history of syphilis, was admitted from a workhouse on December 12th, 1902, in an advanced stage of general paralysis. Eighteen days after admission he had a seizure, followed by monoparesis and acute emotional outbreaks. He then passed into a generally tremulous state—marked restlessness, speech much embarrassed, and gait ataxic. On August 20th, eight months after his admission and some twenty months after the apparent onset of his disease, he slipped and sustained a Pott's fracture. This was treated in a plaster splint. The patient lay fairly quiet for some days, but he had repeated seizures, and after each lost ground. His heart softened and failed steadily, and he developed several evidences of trophoneurosis—formation of large isolated bullæ, an ulcer on dorsum of penis, an angio-neurotic œdema of lower extremities, dilatation of superficial veins, passive effusion into knee-joints, and intertarsal arthritis. Nevertheless the injured limb improved, so much so that some weeks before date of his death he used the limb getting out of bed, and placed his entire weight on it. On October 7th he had a severe and final seizure, from the effects of which he never rallied. He died on October 29th, ten weeks from the date of the fracture.

Remarks.—In the specimen exhibited it is seen that the injury was in the orthodox situation, and of classical character. The fact that it now shows complete repair is, from a surgical point of view, of interest on account of the two very unfavourable elements—syphilis and general paralysis. From a medico-legal point of view it is also of some interest, as it is obvious the accident did not accelerate death.

(1) "Consul" at the Hippodrome.—(2) The "hypertrophy" was not of the gross variety reported by Drs. McDowall and Cowan. In their cases the scalp was thrown into great rugose folds.

A Case of Developmental General Paralysis.⁽¹⁾ By JAS. MIDDLEMASS, M.D., Medical Superintendent, Sunderland Borough Asylum.

WHEN the Divisional Secretary asked me if I could show a clinical case at our meeting to-day, I looked into a number of cases which might be of interest, and ultimately made a selection of one which I thought you would be interested to see, and which was specially interesting to myself. The case is that of a boy, R. B—, admitted to the Sunderland Asylum in March, 1901, æt. 16.

Hereditary history.—The father died in Morpeth Asylum of general paralysis, aged about fifty. He had undoubtedly contracted syphilis. The mother is delicate, but has no evidence of mental instability. The history of her pregnancies is as follows:—First, girl, æt. 17, alive and healthy; second, miscarriage; third, patient; fourth, miscarriage; fifth, girl, æt. 13, living and healthy; sixth, miscarriage; seventh, boy, died after eight months of syphilis. From the history it was ascertained that the husband contracted syphilis between two and three years after marriage, and that the patient was the first child born subsequently. The wife was subjected to antisymphilitic treatment, and so long as it was steadily adhered to she had fairly healthy children, but when it was neglected she had either a miscarriage or a syphilitic child.

Personal history.—The patient had well-marked syphilis at birth, and suffered from a skin eruption, which disappeared gradually under treatment, this being continued for two years. His development was slow. Teething began when he was two, speech when he was three, and walking when he was about four. He was, when young, liable to fits of passion, and was most difficult to manage. He went to school in due course, and was able to pass the usual standard examinations. After leaving school he went to a shipyard, where he was employed as a "catcher." For some time before admission he was observed to be less intelligent than he had been, and his memory, never very good, had been getting worse. In the certificate of admission it was stated that he had the delusion that he had killed a man, and he was also said to have attempted to strangle himself and to stab his sister.

State on admission.—He was undersized, measuring only 56 inches and weighing 84 lbs., but he had no physical deformity beyond an irregular depression on the back of the skull, which, it was afterwards ascertained, had always been present. There were scars in both groins from an operation for double hernia. His teeth were decidedly syphilitic in appearance, and there were scars at the angles of the mouth due to the same disease. His pupils were slightly unequal and sluggish in reaction. There were no muscular tremors, and his speech and gait were not affected. His knee-jerks were rather lively. His temperature

was 99.2° F. Mentally he showed slight depression. He said he had tried to strangle himself the previous day because he was bad, and also that someone had told him to kill his sister. He complained of having pains in the head at times. He talked quite clearly and intelligently, but his memory was slightly impaired. From the history of gradual mental impairment, the fact that he suffered from congenital syphilis, the slight rise of temperature, and the pupillary symptoms, he was diagnosed as a case of developmental general paralysis. This diagnosis has since been amply confirmed.

Progress.—Since his admission the signs of general paralysis, both physical and mental, have steadily but surely progressed. Emotionally he was most frequently depressed, but as a rule this occurred when he had a severe headache, and this almost invariably was worse at night and disappeared the next morning. Occasionally he was mildly exalted, when he would smile and talk more than was natural to him. He did not express any definite delusions. He was sent to work at first, but his memory became worse and his co-ordination began to be affected, so that this had to be given up. It is only within the last six months that his speech has become distinctly affected, and that muscular tremors have made their appearance. His pupils have always been unequal and sluggish, but in course of time they became irregular also. He has never had a congestive attack, but his temperature has occasionally been a little above normal. At the present time there is little doubt as to the nature of his disease, as the symptoms are all very well marked. [These were demonstrated at the meeting.]

Remarks.—The comments on this case which I am desirous of making will be directed solely to two points. The first of these is the etiology of the disease. I have little doubt in my own mind that the essential factor in this case, as in nearly all similar cases, is syphilis. I need not enter further into this question, as it has been ably discussed already. I would merely add this case to the existing long list of those in which syphilis was distinctly and without dubiety present.

The second point to which I wish to call attention is closely related to this. An investigation of the age at which general paralysis makes its appearance in young people shows that there are cases recorded in which the disease began as early as six years, and as late as twenty-two or even more. A similar investigation with regard to adults shows that it may occur at any age between twenty-five and sixty-five. Practically, then, the two series of cases are continuous, and the only difference between them lies in the fact that in the one case we find inherited syphilis is the cause, while in the majority of the others the syphilis is acquired. In a certain number of the latter no history of acquired syphilis is obtainable, and it is

possible that in them we have to do with the inherited disease. I would urge every one who meets with such cases to push his inquiries in this direction. In doing so I am only repeating advice given by Mott and Percy Smith, the latter of whom has placed a case on record (*Brit. Med. Journ.*, February, 1901).

(¹) Shown at the meeting of the Northern and Midland Division at Morpeth, on October 9th, 1903.

Notes on a Case where Treatment with Thyroid Extract repeatedly resulted in Temporary Benefit.(¹) By
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IN the treatment of mental disease thyroid extract was first administered in cases of myxœdematous insanity, resulting in the cure both of the myxœdema and the insanity. The next step was to discover that administration of extract of thyroid gland frequently produced a condition of fever in the patient. In view of the fact that a heightened temperature in an insane patient sometimes brought with it an improvement in the mental condition, thyroid extract was again tried, with variable results.

In 1900 Dr. Easterbrook published his analysis of 130 cases treated with thyroid, out of which number 12 recovered, 29 were improved, and 89 remained unimproved. He comes to the conclusion, after a detailed and exhaustive examination of these cases, that the benefit obtained results from the specific effect of the active principle of thyroid extract, which is to stimulate tissue oxidation.

Our experience of thyroid extract at the Retreat has proved disappointing, except in this one case, where very marked improvement took place, but was only temporary, and did not appear until poisonous doses had been given.

This case is one of mania of now nine years' duration, throughout which time there has been little change in the condition of the patient until brought under the influence of thyroid extract, when for a week—and the change came quickly without any gradual, slow improvement,—instead of an excited, noisy, violent, destructive, and badly behaved patient

we had to deal with a quiet, pleasant, intelligent gentlewoman. The facts of the case are these :

A. B— was first admitted into the Retreat on July 2nd, 1884. She was then 25 years of age, unmarried, and of no occupation. She was born in India, but how long she remained there is unknown. Before coming to the Retreat she had been living in Sheffield. The notes of her case at this time record that there was nothing peculiar about her infancy or childhood, that she was of average intelligence, and had received a good education. It is noted that a paternal uncle was said to be insane. When she was eighteen years of age she had an attack of mental disorder following upon typhoid fever; she was treated at home during this attack, which lasted for more than twelve months, and from which she made a complete recovery. She remained well for the next six or seven years. At the time of her admission to the Retreat in 1884 she had been ill for three weeks. No cause could be assigned for this second attack; there had been no trouble at home of any sort, and she had not overworked herself. The first symptom of insanity was the writing of careless and incoherent letters. This was accompanied by restlessness and sleeplessness, and later on there appeared delusions of a fleeting nature. On her admission she is reported to have been excited and altogether in a state of exaltation. Hallucinations of hearing are said to have been present, but the nature of these is not mentioned. She held conversation with imaginary people; her attention was difficult to secure, and her conversation rambling. She is described as having hair and eyes dark, with strabismus of both eyes upwards and outwards; heart and respiratory system normal. A condition of restless excitement, often maniacal in degree, seems to have characterised this attack, which, beginning in July, 1884, terminated in a complete recovery in January, 1886. Before she began to get well at this time she slept a great deal, much more than is usually observed in cases of this kind.

She was again admitted to the Retreat in 1893, on February 21st. She was then thirty-three years of age. The causes assigned for this attack are nervous shock and predisposition. She is stated to have been suffering then from otorrhœa of the right ear. She was in a state of acute mania, talking incoherently and incessantly, mixing with her talk verses from hymns, passages from Scripture, quoting from the Creed and the Lord's Prayer, referring to Brahmins and Hindoos, and swearing freely. She was destructive and violent, and did nothing for herself. Two months after her admission some slight improvement was noted, but this was soon followed by a relapse into the old state. Since then—except that all her symptoms have been accentuated, as she has been noisier, more violent and destructive, and has done nothing to help herself in any way—the case exhibited little variation up to 1898. By that time she had got into the habit of incessantly rubbing her hands together. Her violence often took the form of sudden impulses, and, being no respecter of persons, she would quite suddenly kick out at any trustful creature standing near. Her appearance then was similar to what it is now, and it is a very curious one. She wears a plain dress made of some strong material. Her figure is angular and her hair is

short. There is the squint and some exophthalmos. The attitude she most commonly adopts is sitting on the sofa or floor, Eastern fashion, with her back very straight and holding up her two hands at one or other shoulder, rubbing them together vigorously, till the skin of the palms has become thick and hard. There she will sit, singing and shouting, for a long time, the noise at night being similar to that during the day. The treatment had consisted chiefly in regular outdoor exercise, with plenty of nourishing food, eggs, beef tea, milk, etc., in addition to the ordinary diet, with some bynol. She rarely had any sedative. Her condition had apparently become one of chronic mania, when in May, 1898, it was decided to put her upon thyroid extract. She was first of all weighed, then kept in bed for a day or two for purposes of observation, the temperature and pulse being noted thrice daily—the former being about normal, and the latter about 72 and of good quality. She weighed 7 st. 13 lbs.

On May 10th she was given 10 grains of thyroid extract thrice daily in tabloids of 5 grains each. The dose was increased daily, and on May 13th she was getting 25 grains three times a day. There was no rise in the temperature, but the pulse had increased from 72 to 90 beats per minute; the patient had slept for three or four hours each day, but had occasionally been restless; she was taking her food well. Two days later the dose had been increased to 35 grains three times daily; still no rise in the temperature; pulse 90; slept for about two hours during the day; was much quieter, and was still taking her food well.

On May 18th she was getting 40 grains three times a day; still no fever; pulse 98. Patient was sleeping three or four hours each day, but was still noisy and restless now and then; appetite good.

On May 19th, nine days after its commencement, the thyroid was stopped. The pulse had not increased in rapidity, but had become small and irregular. For a short time on that day she was excited; after that she was very quiet, sleeping most of the day. She was then given 5 grains of the citrate of iron and quinine three times a day.

On May 22nd patient talked sensibly, was very quiet, and slept about four hours. Pulse was about 80. The following day the improvement continued. The pulse had again increased in rapidity.

On May 24th she appeared sensitive about her surroundings, and asked to be relieved of the strong clothing which she had been wearing, it being what we supplied to the destructive patients. She was provided with more suitable clothing and moved into a pleasant bedroom, which was furnished brightly and comfortably. Had she been given such an one three weeks before she would have reduced it to an utter wreck. This change she appreciated, and was gently grateful for it all. She spoke of having been very ill, but did not appear to remember events which had taken place during the period of excitement. She was able to take a short walk in the grounds, and this she enjoyed, and noticed intelligently the things around her. She was decidedly weak physically. A day later she appeared exhausted, slept for three hours during the day, and had another walk in the grounds. She was still quiet and rational. This evening the temperature rose to 99.2° F., this being the first rise observed.

On May 26th, five days after the thyroid had been stopped, the pulse

was noted to be irregular and feeble; patient had not been inclined to talk, and had complained of aching pains in the legs and side, and said she was feeling ill. She had been exhausted and drowsy, but had not slept much. At 9 p.m. patient was flushed, and the temperature had risen to 100°. The next morning at 4 o'clock the night nurse noticed patient talking to herself, and two hours later she was in a state of much excitement. She was once again noisy, excited, and violent, talking and shouting and rubbing her hands together. The thyroid extract was renewed, and continued for ten days; she was getting 45 grains three times a day for three or four days when it was stopped. The pulse had dropped from 110 to 100, and, on stopping the tabloids, to 85. The patient had gradually become calmer day by day, sleeping more and more each day.

On June 8th patient was again a rational being, and behaved as such. Three days later she complained of feeling very poorly, and of having pains in the legs and side.

On June 11th, as these symptoms seemed to indicate an impending relapse, she was given 25 grains of thyroid extract twice, but she did not get any more. The next day the pulse was very rapid—140; temperature normal. Patient was still quiet, but not so bright; she asked for paper to write to the Queen to thank her for all her kindness. The following morning patient was sleepy and quiet; pulse small and rapid—140; temperature 99.2°; was flushed, and complained of not feeling well. At 12 noon she was found asleep, and fifteen minutes later she was awake, was much excited, and rubbing her hands together in the old fashion. Throughout the treatment patient had taken her food well, but she had lost 16 lbs. in weight in the month. She was given invalid diet, and encouraged to take as much food as she could. At this point the treatment had to be abandoned on account of its profound effect upon the heart, and because the physical condition of the patient had been so much reduced. We had then to restore her bodily health to its level at the beginning of the administration of the thyroid, and it took some months to do this. For another year there was no change in the mental condition of our patient.

In October, 1899, she was again put upon thyroid extract, producing a repetition of the phenomena which resulted under the same conditions fifteen months previously. There was the increasing sleep and the gradual quieting of the patient as the thyroid was pushed. The breakdown was again heralded by flushings of the skin and a sudden marked increase of the pulse-rate, and the patient making the same complaints of feeling ill.

In May of this year, for the third time, thyroid extract was given to this patient. As on previous occasions, she was kept in bed for three days before the treatment was begun, her pulse and temperature being noted every four hours. The rate of the pulse was about 80; it was regular and of good quality. The temperature was subnormal. She had her first dose of thyroid on May 2nd, when she had 4 grains. No change took place in her condition for six days, when the temperature rose to 99.6°, but fell again to normal, not accompanied by the slightest change in her mental condition. Three days later she was quieter, and slept most of the day. She was talkative in the early part of that night,

but soon fell asleep again. The temperature had not risen above 98.2° , and the pulse was about 100—104. On May 13th she had 108 grains in all; she was drowsy, very flushed, was taking her food well, and showed no change in pulse or temperature. Two nights later she slept well, and when awake was very sensible in her conversation. The next day she slept much, complained of thirst, and was sensible to talk to. Still no fever and no increase in the pulse-rate. Early in the morning of May 18th she complained of not feeling well; she was drowsy, answering questions slowly, but coherently; pulse slightly irregular, rate 108; patient complaining of thirst. On May 19th 72 grains given, being the same dose as the previous day; patient complaining of pains; quiet that day, but restless in the early part of the night, and she did not sleep so well. Thyroid stopped on May 20th; pulse 144, irregular; complaining of pain and of feeling very weak. At 10 p.m. of this day a complete relapse ensued; she was again noisy and excited, rubbing her hands together and shouting. She had to be removed to a strong-room again, as all the old symptoms had recurred.

This case was one of considerable wonder to us, as the change in the patient was so very striking. Her very appearance was altered during the week of mental clearness; the squint did not force itself so much upon one's attention, and the exophthalmos was less marked. Her voice, which in her ordinary condition is deep and loud, was, when she was well, soft and low, and rendered attractive by a touch of the brogue. During one of these weeks, at the instigation of Dr. Pierce, her brother, a medical man, visited her. He had not seen a lucid interval in her for over five years, and it made a striking impression upon him.

It was not as though we had got this strange transformation once only in the patient, and could not tell what influence brought it, or how to recall it; but in the administration of thyroid extract it would seem we had the power to call back at will this glimpse of the patient's real self; but how to keep it is another matter.

Thyroid extract seems to have promised so much and realised so little. It is not given without some risk to the heart, and the danger seems to set in just when there appears to be some improvement in the patient's mental condition. Yet, although the hopes which were naturally raised high by the first introduction of this treatment have not been fulfilled, there has been a sufficient number of cases which under it have improved or recovered to warrant a continuation of its use.

(1) Read at the meeting of the Northern and Midland Division at Morpeth, October 9th, 1903.

Clinical Observations on Korsakow's Psychosis. By
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IN the years 1887-91 the late Professor Korsakow, of Moscow (1, 2), drew attention to a form of mental disorder associated with multiple neuritis, and characterised especially by loss of memory for recent impressions, and by the appearance of pseudo-reminiscences. In the great majority of cases the condition is of alcoholic origin, but Korsakow showed that the same psychosis might arise in association with any toxic neuritis. It thus acquired the name of "polyneuritic psychosis." Numerous considerations, which need not be discussed here, seem to show that the mental affection and the peripheral neuritis are due to the action of the same poison or toxin upon different parts of the nervous system.

The psychosis was thus studied in the first instance from the standpoint of the peripheral neuritis. In more recent years a wider view has been taken of the subject, and it has been maintained that the same affection may occur without recognisable peripheral neuritis. Hence the name "polyneuritic psychosis" has somewhat fallen into disuse, and it is now more frequently spoken of as Korsakow's disease.

The great frequency of alcoholism as an etiological factor has led, naturally, to a study of the psychosis in its relations to other alcoholic mental disorders; and it has been shown by Jolly (3), and more recently by Bonhoeffer (4), that it stands in very close relationship to delirium tremens, of which it represents a more severe and protracted form. Any number of intermediate grades are observable between delirium tremens and Korsakow's psychosis, and Bonhoeffer accordingly speaks of the latter as "chronic delirium."

In two previous papers (5, 6) I have described the symptoms and pathological appearances in three fatal cases with polyneuritis, and have made some observations on the psychosis, mainly in its bearing upon the pathology of alcoholic neuritis. In the present paper I propose to give some account of the clinical features in a few other cases, selected from about thirty

examples of Korsakow's disease which have come under my personal observation within the last five years. In all these cases there was a history of alcoholism ; in all but two there were evidences of neuritis, ranging from pronounced paraplegia in several instances, through various slighter grades, down to a condition in which there was perhaps only some tenderness of the calf muscles to pressure, with some diminution of faradic excitability, and slight disturbances of cutaneous sensation in the distal parts of the limbs. In neither of the two remaining examples (one of which is published here as Case 2) could it be positively affirmed that there was no neuritis existing at the time when the patient came under observation, or in the period immediately preceding.

I would describe first of all a typical and well-marked case, in which the classical symptoms of Korsakow's disease were the only noticeable features. The majority of my cases have been of this type. Space does not permit me to describe others, nor is it now necessary to do so, for Dr. Turner has lately reported in this JOURNAL (7) twelve typical examples, and most of my own cases would appear to have closely resembled his.

The first case is selected because it well illustrates some characteristic details, and because it serves as a standard with which we may compare a few somewhat atypical cases, presenting points of clinical interest which appear worthy of study.

CASE 1.—An anæmic, poorly nourished woman, æt. 43, married ; admitted to Colney Hatch Asylum July 18th, 1901. History of alcoholism (duration unknown). Duration of mental disorder on admission, six weeks. Rather talkative, excitable and emotional, usually vivacious, but readily moved to tears. Memory very bad, especially for recent events ; has no idea of time or place ; illusions as to identity of persons ; luxuriant "romancing" (pseudo-reminiscences of imaginary journeys) ; imagines that yesterday she was with some relations at Richmond ; next minute she talks of being at Cambridge the same day. To every question she gives a prompt answer, usually incorrect ; she is continually contradicting herself. Pupils normal ; knee-jerks absent ; she is shaky on her legs ; the calf muscles are tender to pressure ; some tremor of hands, facial muscles, and tongue ; speech slightly stammering.

August 15th.—Weakness of legs more marked. She is now kept in bed.

31st.—Polyneuritis now marked. Atrophy and tenderness of many muscles of arms and legs, with electrical reaction of degeneration. Tenderness of many of the limb nerves. Some defect of cutaneous sensation on legs. Plantar reflexes lively ; knee-jerks absent.

October 15th.—The neuritis continues to advance.

December 19th.—Muscular atrophy, electrical changes, and tremors more marked. Commencing contractures of legs have been overcome by passive movements. There is a tubercular abscess, apparently in connection with the crest of the right iliac bone; this opened on October 21st, and is still discharging. Early tubercle of apex of right lung. The mental disorder has shown no variation since admission, and is illustrated by the following conversation (December 19th):

"How are you to-day?"—"Better thanks; I've been to Richmond this morning—no, yesterday morning; I saw my mother and mother-in-law. I've been up to my place this morning."

"Where do you mean?"—"Up to the hospital; I saw the new doctor that's come—with glasses—very nice."

"What have you had for dinner to-day?"—"Some mutton and a basin of soup." (Is reminded that she had milk pudding.)

"What day of the week is this?"—"Tuesday."

"No, to-day is Thursday. When did you first come here?"—"When do you mean? first of all? Oh, I couldn't tell you; it was before I went to Peterborough for a holiday; that would be October or the end of September." (Never in asylum before.)

"What month is this?"—"April."

"And what year is it?"—"1899."

"What place is this?"—"This is the North-West London Hospital. I saw Mr. C— on Monday night" (mentioning a well-known surgeon, of whom she often speaks in association with that hospital, but who has never been connected with it).

"Do you know me?"—"Oh, yes, of course."

"What is my name?"—"Now that I never did know." (Has heard often.)

"What day of the week is this?"—"Tuesday."

"No, it is Thursday; try and remember; what is it?"—"Thursday."

"What have you had for dinner to-day?"—"Meat and vegetables."

"What day of the week is this?"—"Tuesday."

"I told you it was Thursday."—"Oh, yes."

"Have you had any beer to-day?"—"Yes, I had one glass at Mrs. What's-her-name's, on the way to the station."

"What day of the week is this?"—"Tuesday."

"Who is this lady?" (indicating Nurse W—).—"Mrs. Burdett."

"Is there anyone else here you know?"—"Yes, two downstairs, Mrs. Burley and Mrs. Norris; she's suffering from the same thing as I am; I went to see her last night. I met Mr. C— in the street the night I came home. No, it was Wednesday, because that was the night I went to see Mrs. What's-her-name, and had a cup of coffee; they keep that little off-licence public-house in the Kentish Town Road."

"When were you at Whittlesea last?"—"I came home on Saturday; I went for a week. No, I left last Monday."

And so on, every day much the same. She has been bedridden four months. She has great difficulty in multiplying simple numbers. No hallucinations or marked delirious symptoms have been observed since admission. She eats and sleeps well; often goes to sleep in the middle of her dinner.

February 25th, 1902.—No improvement. Contractures of legs still threaten, and require passive movement.

April 8th.—Considerable mental and physical improvement. Defect of memory and orientation much less marked. No romancing now. Is just able to stand.

September 30th.—Mental and physical improvement continues. Can walk a little.

June 5th, 1903.—Left the asylum “recovered,” save for slight defect of memory. Still a little feeble on her legs. Has gained considerably in weight.

The above conversation illustrates the almost instantaneous obliteration of mental impressions and the gross defect of observation. The patient's ideas as to where she is are constantly fluctuating. She seems for the most part to imagine she is at home, unless something different is suggested by a question (“When did you first come here?” “What place is this?”). Her attention is now directed to the environment, but only momentarily. Something about it suggests a hospital, so she names a hospital familiar to her. But presently she mistakes the nurse for a neighbour, in spite of her uniform. The next question (“Is there anyone here you know?”) again implies a reference to the environment, and again we see the idea of a hospital, padded out, as it were, by an allusion to two supposed patients and a surgeon. But as soon as ever there ceases to be a direct reference to the present surroundings she immediately relapses into the idea that she is at home.

As Bonhoeffer puts it, we see the patient living in a past situation. The present environment is mistaken for a former environment ; its details are construed in accordance with this misconception, and the illusions as to the identity of persons are probably to be regarded in this light. We see the same misconception in delirium tremens. The patient imagines himself in his old surroundings, following his every-day occupation, and he mistakes the most incongruous objects about him for the implements of his calling.

In Korsakow's disease the misconception of the situation is sometimes as detailed and systematised as in delirium tremens. Yet the scene is readily shifted by suggestion from without, in the manner shown in the above conversation. This “suggestibility” is, of course, also observed in delirium tremens. In a typical case of Korsakow's disease which I saw recently it was very striking. The patient fell readily into the traps which I

laid for him. By suitably framed questions he could be easily induced to imagine himself in a different situation from that in which he imagined himself a moment before. Thus :

"What place is this?"—"This is the hospital." (Patient has been in the asylum a month ; he is in bed in a single room.)

"What hospital do you call it?"—"I forget what you call it ; it's where the medical students come."

"Where have you been this morning?"—"I went to Covent Garden Market."

"What did you do there?"—"I bought some rhubarb."

"What did you do with it?"—"Sent it home."

"Did you have a drink while you were out?"—"Yes, I had a brandy and soda."

"Where was that?"—"Opposite your place. I see the painters have got their ladders up outside your place."

"How long have you been here?"—"A week."

"What is your work?"—"Pastrycook" (correct).

"What rent do you pay for this place here?"—"For the shop and bakehouse, do you mean? Eight shillings a week."

"Do you have anyone here to help you?"—"Well, there's the boy."

"Is he at work here to-day?"—"Yes, he's downstairs now."

Korsakow speaks of certain cases in which this misconception of the situation amounts to a fixed delusion. In the cases I have seen, the patient's interpretation of his surroundings was subject to marked fluctuations, spontaneous as well as induced.

It is, perhaps, just this want of fixity of conception of the environment which makes the confabulation so often assume the form of stories of recent imaginary journeys. Yet one cannot overlook cases in which the patient, perhaps not merely from habit, still recounts such journeys, in later stages of the illness, when the disorientation is less marked, and when he can give a correct answer to the question as to where he is. But it by no means follows that because he can give this correct statement he has any continuous and connected appreciation of his surroundings, for his average attention is reduced far below the level of that which he is capable of exercising in response to stimulus. Except when he is aroused by questions, he is in a sort of dream-like state, still living in the past. Such true conceptions of the situation as his enfeebled observation affords him fade from his memory. The lacunæ thus produced are filled up by the revival of older and more persistent impressions, of which the most prominent are those which seem best

to fill the subconscious void occasioned by the poverty of ideas of time and place. The reminiscences of imaginary journeys are pre-eminently of this type, and are not to be regarded as deliberate lies. The confabulation is usually most lavish and spontaneous when disorientation is complete.

But in many cases, especially in the later stage, the patient is uncommunicative, seldom volunteering any statement, though answering promptly when spoken to. The fabrications are then chiefly "fabrications of dilemma." These are apparently designed to meet the immediate difficulty occasioned by the question, but the patient is really convinced of the truth of his statements. The influence of suggestion is very evident in these fabrications. They are quickly forgotten; the patient may give a different wrong answer each time the same question is put to him in the course of a short conversation.

The loss of memory profoundly affects the most recent impressions. Although careful examination usually shows that old impressions are also to a slight extent implicated, the patient is usually able to give more or less accurate statements as to the principal events in his past life.

Interesting questions suggest themselves with regard to the location of the backward limit of the amnesia in point of time. Turner (7) says, "Patients, it will be observed, imagine themselves still to be in the place where they were before their consciousness was seriously impaired." This is true only in a very general way. Jolly (3) describes a case (Group III, Case 4) in which the patient, just before the onset of the disorder, had come to Berlin from Breslau; she forgot the journey, and thought herself still in Breslau. And I might here call attention to the very frequent interpretation of the environment (*i. e.*, the asylum) in the sense of a hospital; here we see traces of a correct appreciation.

The amnesia sometimes stretches back over a long period preceding the onset of the disorder. I might quote the very remarkable case reported by Liepmann (*cf.* p. 129 of Bonhoeffer's *Monograph*). It was that of a journalist, a well-educated and intelligent man, who developed a Korsakow's psychosis in which there was loss of memory not only for recent impressions, but also for a period extending back thirty years, the limit of this period falling in the year 1871. He thought that his parents, and also the Kaiser William the First,

were still living ; he had no recollection of having ever been a journalist, but thought he was still a student, and would talk of his teachers and fellow-students ; he knew his Latin syntax, and could converse intelligently on political and historical questions, but only as they would have presented themselves in the year 1871. Here we have a true retro-active amnesia. I have never met with so marked a case as this, but I am inclined to believe that quite frequently there is loss of memory for experiences of the few days which preceded the onset of symptoms, though in a patient leading a humdrum life in one place the phenomenon may not lend itself to demonstration. The following is the most marked instance of retrogression I have seen :

CASE 2.—Man æt. 63, cab-driver, admitted to Colney Hatch November 17th, 1899, four weeks after onset of disorder. There was probably a delirious initial phase. At the workhouse infirmary from which he was sent to the asylum, it was stated that he was very dazed, got out of bed at night and wandered listlessly about the ward, stating he heard cab bells ringing, and demanding fares from the other inmates, alleging that he had just driven them in his cab. (Here we have in miniature, expressed in a sort of "occupation delirium," all the characteristic features of a Korsakow's psychosis—defect of observation and memory, disorientation, pseudo-reminiscence, and illusions as to the identity of persons).

No delirious symptoms or hallucinations have been observed since admission. His pupils were somewhat unequal, irregular, and sluggish ; knee-jerks absent ; gait stamping, unsteady, ataxic. There was no definite evidence of neuritis, but it could not be excluded. He had been a heavy drinker for years. Syphilis probable (scar on penis).

There was profound loss of memory for recent impressions. He did not know where he was ; thought he had only just come ; could not remember which bed he slept in, nor what he had had for dinner ; could not remember the day of the week when told. Later, thought he had been in another ward at first (always in the same ward).

Though there was some *general* impairment of memory, he could give considerable details as to his past life, his date of birth in 1836, the names and addresses of firms in whose employ he had been, and the periods for which he served them. But he had no recollection of his last employers, a firm in the Caledonian Road, for whom he had worked for some time. He denies all knowledge of them, and says he has never worked for anybody in the Caledonian Road. He gave his age as 59. As far as I was able to make out, there was complete loss of memory certainly for many months, and probably extending back about four years.

After about ten months he could tell where he was, and remembered which bed he slept in, but he had no idea of the date, and only a vague notion that he had been in the asylum some months ; he could not

remember for more than a minute things which he was told. The knee-jerks had returned, but gait was still defective, and there were fine tremors of hands and tongue; pupils equal.

October, 1903.—There has been little further change. He does not know the name of any one of the attendants in his ward; thinks he has been here two years. He has no recollection of the firm in the Caledonian Road. There has never been any noticeable defect of judgment, and he always converses in a rational sort of way; he has been well conducted, and respectful and pleasant in manner. Pupils equal and react to light. Gait is much better, and there is no Rombergism.

November 28th, 1903.—Questioned at some length upon London topography, he acquits himself creditably, and describes in accurate detail a number of cab routes, including short cuts through side streets and squares. He knows the cab fares between various points; also the position of various theatres, hospitals, and restaurants—Simpson's, Scott's, the Old Cheshire Cheese, etc.,—but his ignorance of the Café Monico and Romano's seems interesting. He cannot remember the name of the Queen, "but her mother was the Duchess of Kent;" she has reigned over forty years; her husband has been long dead. Mr. Gladstone's age is now about 76. Lord Beaconsfield is dead. Patient knows he is in Colney Hatch, but has only a vague idea where that is; says he has been here two years. Thinks this is the year 1902, and now says he was born in 1841. Says he had mutton for dinner to-day (soup). Does not know the name of his medical officer.

It may often be observed that while the patient has some recollection of the multiplication table, and can multiply simple numbers in accordance with his recollection, he is often unable to reverse the process for the same numbers. Thus, in reply to the question "What is twice seven?" he will promptly answer "Fourteen," but when he is thereupon asked "What is seven times two?" he gives a wrong answer, or says he does not know. He does not realise that the two questions are identical. It is not easy to decide to what defect or defects this very frequent phenomenon is due, as several factors have to be taken into account.

The psychic defects are, essentially, defects of association. Interference with sensory impressions, even in cases with severe and wide-spread neuritis, rarely plays any considerable part. In Case 1, and in several other severe neuritic cases, the mental state offered little hindrance to the rougher varieties of sensory tests. There was no appreciable impairment of auditory or visual acuity, so that there seemed to be no adequate peripheral basis for the disorder of observation. In many cases, however, defect of attention offered great difficulties, especially

at the onset, but bore no relation to the severity of the neuritis.

With the subsidence of the more pronounced confusion of the initial stage, the characteristic defects stand out in greater relief. As Meyer and Raecke remark (9) the clinical picture derives its peculiar stamp from the fact that the amnesia, disorientation, and confabulation present themselves *bei durchaus ruhigem, geordnetem Wesen*. And, as Bonhoeffer (4) says, "the formal process of thought often shows, in other respects, scarcely any damage; in purely intellectual matters, patients often exhibit quite appropriate reasoning."

The most common mode of onset is in a condition scarcely to be distinguished from delirium tremens. This initial delirious phase is often more protracted than an ordinary delirium. In a case which I have previously reported (5) it persisted for ten weeks, up to the time of the patient's death. The delirious symptoms tend to disappear more or less gradually, and the disease then assumes the characteristic aspect illustrated by Case 1. Yet in this second (amnesic) stage slight nocturnal recurrence of delirium is common. This stage may last from a few weeks to many months, or even years. Slight improvement is frequent, but complete recovery is rare; there is nearly always some residual defect of memory.

In the initial stage hallucinations of various kinds are frequent, and in later stages they may return occasionally, especially at night. In a few cases they may return in a marked form after the lapse of perhaps many months, and are then, in my experience, apt to be accompanied by delusions of persecution. I give the following instances illustrating this somewhat atypical course:

CASE 3.—Man æt. 33, carpenter at a brewery, admitted to Colney Hatch August 10th, 1900. History of five quarts of beer daily, also some rum. Delirious onset three weeks ago; "imperfectly appreciate of his environment; no memory for recent events; talks to imaginary persons under the bed or outside the ward; wet and dirty at times." On admission the delirious phase was subsiding, but there was marked loss of memory for recent impressions, and defect of orientation as to time, place, and persons, with pseudo-reminiscences of imaginary journeys. No hallucinations now observed. Marked neuritis, especially of legs; cannot stand unsupported; knee-jerks absent; pupils somewhat dilated, action to light and accommodation sluggish. Rapid, irritable heart. Syphilis four years ago.

August 25th, 1900.—Cannot yet tell where he is, but when shown the letters "L. C. A." on his clothes he knows they stand for "London County Asylum." Thinks he has been here a week; has no idea of the date; thinks it is spring; does not know what he had for dinner. No hallucinations observed. Quiet and well conducted. Wasting of muscles, with electrical changes; neuritis improving somewhat.

November 17th.—Memory better; knows where he is; neuritis improved.

After this he continued to improve, though there was still appreciable defect of memory. But in June, 1901, he became restless, trying to escape, imagining he heard his relatives calling him. He became gradually more troublesome and intractable, and developed delusions of illegal detention; thought his letters were kept back; wrote to the police. Handwriting good.

October 10th, 1903.—Delusions of persecution persist. He shows me some rather neat plans of carpenter's work, which he says he has made to prove that he is sane. There is now no marked defect of memory or of orientation as to time, place, or persons; no pseudo-reminiscences. Is in good health; no tremors, speech defect, or Rombergism; gait fair; knee-jerks absent; pupils normal.

CASE 4.—A man of bloated appearance, æt. 56, van-driver, admitted to Colney Hatch September 15th, 1899. This is said to be his first attack, duration unknown. History of alcoholism. Certificate (September 6th): "Has great loss of memory; thinks he was doing work among the horses at Aldershot three days ago, but cannot remember what he was paid; he says it might have been at Kingston-on-Thames; does not seem to know that he has been chargeable to the parish ever since July. Wanders aimlessly about; has no memory regarding days or weeks, or even years, and cannot say where he is or whence he came." On admission: gait very unsteady, knee-jerks absent, calf muscles tender, some loss of sensation on legs and feet; pupils equal, sluggish.

The neuritis began to improve in January, 1900, and he gained in weight. There was also some slight improvement in orientation and memory. His mental condition remained then much the same for about twelve months, and may be illustrated by the following note:

August 9th, 1900.—He knows where he is; thinks he has been here about six months; knows this is August, but cannot tell the day of the week nor what he has had for dinner. When his brother visits him he forgets all about the visit five minutes afterwards. "When did your daughter come and see you last?" "Last week" (she has never come). He often says he went out to see his brother "yesterday." At night he is restless and talkative, complaining that someone has stolen, from under his pillow, money which he has won at the races during the day. Memory for important events in his past life is good. He gives accurate statements as to his date of birth, his marriage, separation from his wife, the various employers he has worked for, his illnesses and accidents; has had typhoid fever and pneumonia; had gonorrhœa and syphilis at twenty-one—describes the symptoms and the treatment he

underwent. His statements on these points are confirmed by his brother. He answers questions promptly and carelessly, and shows marked "Trinkhumor." If he does not know the answer to a question he invents promptly (fabrications of dilemma).

Pupils small, equal, regular, react to light and accommodation. Twitchings of orbicularis oculi and other facial muscles; fine tremor of tongue; knee-jerks absent; plantar reflexes lively. There is now no wasting or tenderness of muscles, or defect of cutaneous sensation. Gait slightly unsteady.

In April, 1901, hallucinations of hearing became evident; he complained that someone was accusing him of various crimes through a telephone. Since that date he has never been free from delusions of persecution.

October 10th, 1903.—Delusions persist. He complains that people kick him, jump on him, and choke him. Has been violent at times lately. The loss of memory for recent impressions and the pseudo-reminiscences are still well marked. He knows where he is, but has no idea how long he has been here; does not know the day of the week or the month, and when asked what season of the year this is he turns to look out of the window at the trees, and says, "Summer." Thinks he has seen me at Eastbourne; does not know the names of any of the persons with whom he comes in contact daily; thinks one of the attendants is his brother-in-law. He is careless and jocose in his manner. Pupils, knee-jerks, and tremors as before. Slight Rombergism. Gait fair.

CASE 5.—Woman *æt.* 41, admitted to Colney Hatch August 1st, 1900. Her mother died in Banstead Asylum. Father and two brothers died of consumption. One sister dead, another living. Patient has been married fourteen years; no children. She has been for at least fourteen years a heavy drinker of beer and spirits; "never drunk." Suffered from morning vomiting and headache, and from numbness, tingling, and tremor of the hands, cramps in the calves, and starting of the limbs in bed. During the past fifteen months has had several attacks of depression—rambling in her talk, refusing food, neglecting her household duties, wandering aimlessly up and down stairs, or else sitting all day long in a chair muttering to herself, curiously scrutinising her fingers, and picking at her fingers or apron. Restless and talkative at night; got up and dressed at 3 a.m. because she thought someone was going to set fire to the house; threatened to drown herself if her step-daughter did not leave the room. This state would last about a month, and then for two or three months she would be "quite well and jolly." Had been worse the last six weeks than ever before. Had lately said she heard voices of people talking; they were in the air of the room, and frightened her.

Brought to asylum from workhouse infirmary under certificate dated July 25th, which stated that she made contradictory statements, that her memory was bad, and she did not appear to comprehend her surroundings, being quite at a loss to remember time and place for recent events; *e. g.*, she said she had run away because she was tantalised by her husband, but when asked why she came to the infirmary she

said to find her husband. Said she had been there between a week and a fortnight (really only one day), that she walked there, and that her step-daughter walked there with her (not so); and when asked what place she was in, she said, "These are oil and colour works."

Physical state on admission to asylum.—Has a dull, vacant, and morose expression, with a somewhat mask-like immobility of the cheeks; twitching of left orbicularis oculi and corrugator supercilii; tremor of lips in speech, with some slovenliness of articulation; fibrillary tremor of tongue; fine tremor of hands, and shakiness in lifting cup to drink. Gait unsteady; she staggers in turning round; slight Rombergism. Some general wasting of limb muscles, but especially of interossei, thenar, and hypothenar muscles of hands, which are tender to pressure; also triceps and forearm extensors in less degree; calf muscles wasted and tender to pressure; ulnar and posterior tibial nerves are very tender. There is marked hyperæsthesia of the feet; she complains of pains in the toes; knee-jerks and plantar reflexes brisk. Pupils of moderate size, equal; reaction to light and accommodation extremely limited and sluggish; slight lateral nystagmus.

On admission, and for a long time after, she was much confused. She occasionally gave accounts of imaginary journeys, but she seldom spoke except in response to questions; fabrications of dilemma were prominent. At first she thought she was at a country inn, but after ten days she had some vague notion she was in a madhouse. Moved to another ward on August 15th, she began about August 18th to think the place looked different, and thought she was in the London Hospital. For weeks after this she again often thought she was in an oil and colour works, or a chemical works. Had no idea of the time of day, date, or time of year; thought it was spring, 1888. Asked, in the early morning, "What have you had for dinner to-day?" she says, "Fish." August 18th, volunteers the statement, "I think my husband came to see me last night" (correct); being much prompted, she remembers that her step-daughter came also; but after a minute, when asked "When did your husband come to see you?" she says, "Last Sunday" (incorrect). "What day is this?" "Sunday" (Saturday). "Are you married?" "Yes, but I have left my husband." "How do you support yourself, then?" "Oh, I keep house for him." She can multiply simple numbers, but cannot reverse the process for the same numbers. "What is twice six?" "Twelve." "What is six times two?" "I don't know."

She imagined that people in the ward were people she knew; "I saw my brother here just now."

August 23rd.—Thinks I am "one of the governors of the place."

31st.—Thinks I am a magistrate.

After about six months she began to think I was "John Hart." This afterwards developed into a sort of delusion. "You come round here and call yourself a doctor, you rascal. I know you; you're John Hart, that's who you are; go home; mind your own business."

She was often seen looking suddenly behind her, but no more definite evidence of hallucinations was forthcoming until August 23rd, when she got out of bed, saying someone had told her to get up.

28th.—Asks, "Is it true my husband has been shot dead?"

December 14th.—Hallucinations suddenly became marked. Two of the other patients were talking about her past life, "about the rolling-pin what was found between the mattresses, and about her husband." In consequence she became somewhat aggressive for a few days.

In the first few weeks after admission she repeatedly refused food; eyed it suspiciously; thought it was poisoned; dipped her finger in the milk to see if it was drugged. She was very nervous and anxious, easily frightened, suspicious of everyone, and much alarmed at any physical examination.

The course of the malady may be indicated by the following extracts:

August 15th, 1900.—This morning she was very dazed and shaky, and apparently unable to speak; could scarcely stand. At noon she spoke, but was lost, suspicious, and frightened. In the evening is stated to have shivered for an hour. Temperature remains normal. Kept in bed.

16th.—More stuporose, feeble, and tremulous. Pupils scarcely react at all.

22nd.—Restless, tremulous, anxious, fidgety. Tries to get out of bed. Mutters unintelligibly to herself; picks her fingers, bed-clothes, etc. When asked what place this is she looks for the mark on the bed-linen or on the teacup. Feeds herself, but forgets her food, and has to be told to go on with it. Though carefully told the day of the week a number of times, and made to repeat it, she does not remember it a minute after, and thinks it is a fresh question altogether. Pupils now quite inactive to light. No external ocular paralysis. Hyperæsthesia of toes less.

28th.—Remains quite disorientated. Tremors and nystagmus well marked. Pupils quite inactive. Still kept in bed.

September 8th.—Mentally clearer, and physically a little stronger. Tells how she was taken to the studio (on September 6th) to be photographed, though she thinks it was yesterday. Says she has been here a long time. Knows some of the other patients by name. Complains more of tingling and numbness in arms and legs. Pupils react very slightly to light. Now gets up for a short time daily.

October 4th.—Distinctly less confused. Speech and gait better. Pupils react better to light and accommodation. Ophthalmoscopic examination: media and discs clear; doubtful slight hyperæmia of discs. Knee-jerks brisk; plantar reflexes normal; tenderness of muscles and nerve-trunks as before. Faradic excitability much diminished in thenar, hypothenar, and interosseus muscles of hands, almost abolished in calf muscles, and completely abolished in anterior tibial muscles; calf muscles respond slowly and sluggishly to galvanism, anterior tibials scarcely at all. Faradic reaction preserved in quadriceps and hamstrings.

December 16th.—Stronger on her legs. Knows where she is. Less confusion, but marked defect of memory and ideas of time. Illusions as to identity, auditory hallucinations, and delusions that food is poisoned, well marked. Pupils now react normally.

Later, the confusion and hallucinations became less marked, but there was still great defect of memory. She knew where she was, and answered briskly when spoken to, but was rather ill-tempered and intractable,

taking little interest in anything, and repeatedly demanding her discharge from the asylum. She gained considerably in weight. The gait was fair.

October 10th, 1903.—Still in Colney Hatch. Confabulation still marked. I asked her:

"How long have you been here?"—"A week."

"Were you here at Christmas?"—"Yes, but I have been out and come back."

"How many times have you been here, then?"—"Three times."

"When were you here last?"—"It was before I lost twins; I'm carrying now. And then they went and sent me to Banstead; I can't think why; I'm not mad."

"Why are you here, then?"—"I'm here to be recognised."

She says the ventilator gratings in the walls are "for them to look through and spy on her." Says she heard her husband's voice just now telling her to go straight from the dining hall to the ward. Repeatedly says she has been dipped in the Thames. Has delusions as to the identity of some of the other patients. She knows she is in "London County Asylum," but cannot or will not tell the name of it. Is irritable, and resents being "asked so many foolish questions." Is quiet, unoccupied, takes no interest in anything; on rare occasions her habits are faulty. She reads fairly well a few lines from a newspaper. Pupils normal. Knee-jerks brisk. Still has cramps in the legs. At the end of the interview she says, "You are Mr. Holder, aren't you?"

It appears somewhat uncommon to meet with cases in which auditory hallucinations are so prominent and persistent as here, and which in other respects present the characteristic picture of Korsakow's psychosis. But in the delirious initial phase auditory hallucinations are often recognisable. In several cases which I have had the opportunity of observing closely in the delirious stage, the combined visual and tactile hallucinations characteristic of delirium tremens were a marked feature. The patients often imagined that rats, cats, dogs, etc., were in, on, or under their beds. Several married female patients thought they had recently been delivered of children; the expression of this delusion was usually associated with the idea that the child was there in the bed at the time of speaking, and that the nurse was the midwife, while the observer was in one case believed to be the accoucheur; there was thus a systematised misconception of the environment, somewhat reminiscent of that seen in the "occupation delirium" of delirium tremens. A delusion of recent confinement of this type I do not remember to have ever observed apart from peripheral neuritis.

Dr. Percy Smith (8) remarks on the rarity of delusions of electrical shocks in polyneuritic psychosis. I have observed

them only in one case. This was in a woman who presented a typical delirious onset (she imagined rats were running over her bed); there was slight neuritis of the legs, with tenderness of muscles and loss of knee-jerks. After a few weeks the disorientation became less and the patient began to realise that she was in an asylum, but she never thought she had been there more than a few days. There was marked defect of observation, and loss of memory for recent impressions, with illusions of identity, but very few pseudo-reminiscences. In the course of a few months auditory hallucinations of angry, threatening, and accusing voices became prominent; the patient was often heard engaged in vigorous altercation with the voices. There were also powerful ideas that her husband was unfaithful. She now began to have delusions that electricity came up from the ground into her legs. Signs of active neuritis had by this time subsided. The amnesic condition persisted. The case cannot, however, be regarded as a typical case of Korsakow's disease; it approximates in some respects to alcoholic hallucinosis (Kraepelin's "hallucinatorische Wahnsinn der Trinker").

The occurrence of such transitional forms, and the occasional observation of Korsakow's symptom-complex in apparently quite different pathological conditions, such as general paralysis, senile dementia, and cases of gross cerebral lesion or intracranial tumour (9), suggest the question, often raised before, whether we are justified in speaking of a definite psychosis, or whether we have to do merely with a syndrome of unknown pathological significance. It cannot be denied, however, that the characteristic symptoms occur most frequently, and in their most marked form, in association with peripheral neuritis, upon a basis of chronic alcoholism, in cases which otherwise, and especially at the onset, resemble delirium tremens.

The following, however, is a case of general paralysis in which Korsakow's symptoms were prominent, and were ushered in by a delirious phase resembling delirium tremens.

CASE 6.—Woman æt. 42, widow, a cook, admitted to Colney Hatch October 15th, 1900. History of several years' excess in drink (whisky, stout). No history or marks of syphilis; her daughter suffers, however, from interstitial keratitis. For the last twelve months patient has complained much of pains in the legs. She had also had several severe "faints." She was seized with epileptiform convulsions on September 30th, 1900, and was taken to a hospital next day; was more or less "unconscious" till

October 4th. She then became restless; would not stay in bed; wandered about the ward, talking to herself about her work, and trying to find her boxes; was quite disorientated. She was taken to a workhouse infirmary, and thence to the asylum.

On admission to asylum: pupils of medium size, equal, Argyll-Robertson. Knee-jerks exaggerated. Gait very unsteady. Speech slurring and tremulous, typical of general paralysis. Much general tremor. Tenderness of calf muscles, with great reduction of excitability to faradism and galvanism.

She wanders about the ward; says she is cooking me a steak; removes the plants from the tables, and pulls quilts and sheets from the beds to lay as tablecloths; asks the nurses for plates, knives, and forks. "What is Mr. Arthur going to have?" (thinks I am Mr. Arthur); complains that I am not punctual at meals, and that I let the dinner get cold. "I shan't stop in this place; I shall give notice. You don't allow me any beer, and don't pay me my wages." Placed in a single room, she rattles at the half-door and says, "This is a rotten oven; you can't get the oven door open."

For about a fortnight she continued in this lively state of busy "occupation delirium." In November the delirium gradually subsided, but she was still quite disorientated; mistook those about her for old acquaintances, and gave accounts of imaginary journeys to Brixton and Tulse Hill. From the time of admission she had auditory hallucinations; she imagined she heard voices of people swearing. These hallucinations were not prominent.

There was little further change till December 7th, when she had a prolonged epileptiform seizure. After this she remained very stupid, feeble, restless, and tremulous, and could rarely be got to speak. She had another such seizure on December 28th, and yet another on the night of January 22nd, 1901, in which she died.

At the autopsy the brain showed marked characteristic macroscopic appearances of general paralysis. There was some fatty cirrhosis of the liver.

It is obvious that we cannot ignore the determining influence of the alcoholism in this instance, which perhaps suggests caution in the interpretation of other paralytic cases presenting this aspect.

It is a pleasure to me, in concluding, to express my thanks to Dr. Seward, medical superintendent of Colney Hatch Asylum, for permission to publish these cases; and to my late colleagues, Dr. C. F. Beadles and Dr. S. Lloyd Jones, for the facilities they have afforded me for examining cases from time to time since I ceased to be a medical officer at that asylum.

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Occasional Notes.

Herbert Spencer.

Herbert Spencer is dead. The last and greatest of the giants of the Victorian age has passed away; and, in the tumult and clamour of evanescent political strife, the country of his birth is strangely indifferent to the portentous loss that it has suffered. From the uttermost parts of the earth—from the length and breadth of the great continent of America; from France, Germany, and Italy; even from far-off Japan—come messages of condolence and appreciation of the mighty dead; but here his loss is scarcely noticed. Truly, a prophet is not without honour, save in his own country and among his own people. Queen Victoria was a great queen, and worthily ruled a great nation; but to distant generations the name of Queen Victoria will mean as little as the name of Semiramis means to us,

while the name of Herbert Spencer will loom as large as to us does that of Aristotle. In a future which may be distant, or may be nearer than we expect, when England, after occupying for a time the position of Holland, has become a sort of Isle of Wight for honeymooning Americans, Golders Hill will share with Stratford-on-Avon the honours of a place of pilgrimage for those who desire to honour the greatest of their race. What Sir Isaac Newton achieved in co-ordinating phenomena in space, Herbert Spencer achieved in co-ordinating phenomena in time. His task was almost superhuman, yet through ridicule and neglect at first, and at last in spite of the affectation of prigs, who feigned that his teaching was obsolete, he kept steadily to his task; devoting his life with wonderful purity of purpose to the completion of his great system of philosophy. He began in spite of scorn and ridicule; he lived to see his philosophy well-nigh universally accepted; and he lived to see it sneered at as antiquated by writers with less than a tithe of his knowledge, and with not a twentieth part the tithe of his intellect. He heaved Germany out of the slough of Hegelianism, only to see his own countrymen plunge and wallow in the same mire—to see them, as they struggled against asphyxiation, affect a sublime superiority over those who stood dry upon the bank, with limbs unhampered and breathing unobstructed.

There is a curious and wide-spread error, which Spencer never thought it worth while to rectify, which attributes the doctrine of evolution to Darwin, and regards Spencer as merely a disciple of his. (In earlier years Spencer was taunted as an imitator of Comte, until he put an end to the falsehood by publishing his *Reasons for Dissenting from the Philosophy of M. Comte*.) Darwin himself, the most honest and the least self-assertive of the human race, was the very last man to have countenanced a view so erroneous, and he probably never knew of it. Spencer's *Doctrine of Evolution* not only covered an immensely greater area of thought than Darwin's *Natural Selection*, but actually antedated it in point of time. There is therefore no excuse but the grossest ignorance for making the assertion.

Herbert Spencer is dead; but of no man could it ever be more truthfully said that "he being dead, yet speaketh." He has left us not only the colossal monument of his published works—a *monumentum aere perennius*,—but he has left the world for

ever richer by his example: the example of a brave man struggling uncomplainingly, through ill-health and pecuniary embarrassment, to the achievement of a stupendous task. He lived in a world in which many great men towered above the ruck of mediocrity. He has left a world in which everyone is clever, and no one is great. Now that he is dead, it seems scarce possible that we can have been contemporaries with so great a man. It is as if some huge *Dinotherium* or *Mastodon* had been found browsing amongst our improved shorthorns. There were giants in those days; and, although we may not predict the surprises that Nature may have in store for us, it seems unlikely that the world will witness the birth of another Spencer till it sees another Shakespeare.

C. M.

Miss Hickman.

The case of Miss Hickman appears a very mysterious one in the light of the facts which have become known. An able, sane, sensible, athletic young woman, in the prime of life, and with no known antecedents of mental disorder, a qualified medical practitioner, holding a temporary hospital appointment, leaves the hospital one summer morning without notice, and is never seen or heard of again until her decomposed body is found, two months afterwards, hidden away in a thicket in Richmond Park. The evidence of suicide was conclusive, and at once an hypothesis is mooted that the responsibility of her position weighed so heavily upon her as to unhinge her mind. On this hypothesis is founded a further thesis concerning the unfitness of women to hold positions of responsibility, and especially their unfitness for the profession of medicine. Whether women are unfit to practise medicine need not be discussed here, but it is as well to point out the fatuity of the hypothesis on which the thesis is grounded. Apart from such instances as those of Queen Victoria and Catherine II, which go to show that certain women, at any rate, are capable of holding positions of responsibility even greater than that of house surgeon to a hospital, there is no evidence that Miss Hickman felt her responsibility unduly. As has often been pointed out in another part of this JOURNAL, we are far too apt to speak of crimes as "motiveless" when all we are justified in saying is

that we cannot discern an adequate motive for them. We have no surety that we know all the facts, and if all the facts were as well known to us as to the actors in these dramas, the probability is that the number of "motiveless" acts would be sensibly diminished. Every one of us has an outer life, known to all our associates, and an inner life, the whole of which is known to ourselves alone, though glimpses of it may be imparted to intimate confidential friends. To those who know our outer life only, many of our acts may, nay must, appear "motiveless," although they may have been done after mature deliberation and consultation with our confidants; and if the whole of the inner life were known, it is probable that the residuum of "motiveless" acts would be very small.

Our excellent contemporary, the *Spectator*, founded upon the case of Miss Hickman a plea for the value of confession; not by any means necessarily to an ecclesiastic, but the relief of the overburdened mind by communication of its woes to a sympathetic hearer. Our experience of the working of the human mind, both in order and in disorder, leads us to agree fully with the suggestion.

"Give sorrow words; the grief that does not speak,
Whispers the o'er-fraught heart and bids it break."

If the unfortunate lady, whose fate kept the whole country in anxiety, had had access in the hour of her tribulation to some true and confidential friend, into whose sympathetic ear she could have poured her woes, whatever they were, she would probably be alive now, a healthy, happy, useful member of society. The moral that her unhappy end teaches to us her survivors may be expressed in two words:—Cultivate friendships! We may never need to be extricated from such dire misery as she must have suffered, but who is there that would not be the better, at some time or other, for the services of a good Samaritan who should pour the oil of sympathy into the wounds of fortune?

C. M.

Anti-vivisection.

The case of Bayliss *v.* Coleridge draws attention to the existence in our midst of a considerable class of persons who,

while often estimable and intelligent in the general relations of life, exhibit striking obliquity of mental vision in some special direction.

With those members of the Anti-vivisection Society who merely wish that vivisection should be carefully guarded from abuse, all right-minded persons must agree, but it is a matter for regret that this Society is dominated by a section that desires to entirely prevent physiological research.

These ultra-anti-vivisectionists afford a psychological study of great interest, and the proceedings of the Society yield an invaluable field of research in the pathology of this form of mental variation.

Inconsistency is a prominent characteristic of the ultra-anti-vivisectionist. For example, a prominent member of the Society is, or was, in the habit of holding bird battues, at which, for his personal enjoyment, more animal suffering has been inflicted in one day than could be caused under existing conditions by all the licensed vivisectionists of England in a year.

Nearly every anti-vivisectionist daily partakes of animals killed by a painful wound, inflicted without anæsthetics, and accompanied in the case of pigs by outcries louder than the most imaginative anti-vivisectionist could invent. Hundreds of thousands of animals are thus put in pain, but as the anti-vivisectionist profits by it he raises no protest.

Anti-vivisectionists not uncommonly reduce their pets by injudicious over-feeding to a state of disease, which renders the lives of the unfortunate animals a prolonged torture. Yet the anti-vivisectionist regards their sufferings with sympathetic complacency. It is only when his imagination is hurt by verbal or pictorial exaggerations of vivisection that his indignation is roused ; and, as the above illustrations have shown that the existence of real sympathy with animal suffering is very doubtful, the probable motive is a desire to save this imaginative self-feeling.

The effect on the moral character resulting from indulgence in this morbid selfism may be found in the reports of the Anti-vivisection Society, and is well brought out in the evidence at the recent trial. Perception is so blunted that the most obvious things are not seen, and the matters perceived are perverted by their preconceptions ; the statement of facts is often unreliable,⁽¹⁾ but it would be beyond the scope of a brief

note to trace the moral deterioration to the degree in which there is manifested, against those who differ from them, malice, hatred, and all uncharitableness, coupled with an apparent suspension of all sense of honour, fair play, or justice.

In this stage the ultra-anti-vivisectionists appear to become reckless. Without knowledge or experience of the value of scientific research, and in face of overwhelming testimony of its usefulness, they are willing to deprive untold myriads of animals and human beings of relief from pain and suffering.

Their anti-social characteristics are shown by their malevolence in trying to injure the hospitals, thereby directly inflicting much suffering on the sick poor. They accuse physicians of the highest character of the vilest motives, one canon of the Church, in his anti-vivisection furor, speaking of persons who even differed in opinion from him as "inhuman devils." The reckless disregard of inflicting personal injury has been well exemplified in the recent trial.

This class of persons is all the more dangerous from its assumption of superior morality, its active verbosity, and its love of notoriety.

The abnormal emotionalism of the ultra-anti-vivisectionist, which thus overrides reason and the higher moral feelings, is developed by habitual indulgence in emotional excitement, and is communicated by the contagion of sympathy with fellow-sufferers. In this last respect it has some analogy with the emotional epidemics of the Middle Ages.

The suffering and horrors in the illustrated anti-vivisection leaflets are the "dram" of the intemperate emotionalist, while the meetings and lectures, at which "the flesh is made to creep" by histrionic and pictorial displays, are the equivalent of the debauch in more sensual indulgence.

The predisposition to this abnormal emotionalism, like that of the mediæval emotional epidemics, is the deprivation of the normal outlets for feeling. There exist in our midst a large number of unmarried and childless persons whose unsatisfied instincts are vicariously gratified on animal pets, or by the signing of cheques for the relief of suffering with which they have only an abstract acquaintance.

The remedy is that these persons should be brought into direct contact with dependent and suffering humanity; should adopt children in place of animal pets; and should personally

come in contact with the suffering they wish to alleviate, but with which, from over-sensitiveness, they at present spurn all personal contact. If they could be brought face to face, as the physician is, with irremediable suffering, which they earnestly wished to relieve, their point of view would be changed. Helping the inmates of cancer wards or homes for incurables would be most desirable experience for them.

This ultra-anti-vivisectionist class, with its congeners, constitutes a serious danger to society. There can be no reasonable doubt, for example, that the anti-vaccinationists are morally responsible for the deaths of many thousands of helpless children ; while tens of thousands of deaths may be fairly ascribed to the anti-contagious diseases movement ; and if the anti-vivisector were successful, the victims would be still more numerous.

The emotional classes of modern society, however anti-social in the result of their actions, are not really criminal, since they act with a good intent and "mean well."

In spite, therefore, of the anti-vivisector's utter uncharitableness and irritating untruthfulness, pity and sympathy with all human infirmity should actuate scientists to remove their want of knowledge, and to guide their good intentions into channels of real useful activity for suffering humanity.

Scientists are to blame for having stood aloof from these movements, leaving them to fall into the hands of the ultra-cranks, of the notoriety hunters, and of persons actuated even by less worthy motives. A little leaven of real knowledge would have kept them within the bounds in which they should be restricted, and within which they have been useful ; it is even yet not too late to effect this.

(¹) See in this respect a letter to the *Times* of December 11th, 1903, from Mr. Stephen Coleridge, in which he speaks of a leaflet, issued by the National Canine Defence League (a rival anti-vivisection society), as containing "a series of grossly false and misleading statements."

Drug Therapeutics in Asylums.

Clinical observation on the action of medicines, both new and old, is probably one of the most valuable fields for that extension of clinical work so much to be desired in hospitals for the insane.

The asylum clinician has such great advantages in regard to the observation of the action of medicaments, that it is a neglect of opportunity if he fails to lead and instruct the whole medical profession in this respect. In private or out-patient practice, and even in ordinary hospitals and sanatoria, the results of any mode of treatment are liable to be vitiated by variations of diet and habits of life, which are entirely beyond the ken of the physician.

In the hospitals for the insane, on the contrary, the diet and habits are under almost absolute control, and observation on the results of treatment should be much more reliable.

Analytic and synthetic chemistry are daily placing in the hands of physicians innumerable new compounds, the physiological action of which has been to a certain extent demonstrated, and their beneficial effect in diseased conditions testified to by more or less scientific medical authorities. The latter, however, are sometimes doubtfully reliable, from the fact that they have been to some extent associated with the manufacturing firms who have the drug to sell.

Independent authoritative examination of the action of drugs is therefore much needed. Formerly the repute of drugs was endorsed by adoption into the Pharmacopœia, on the authority of the College of Physicians. This body, however, seems to have allowed this function to lapse, very much to the advantage of the patent or advertising medicine vendor, and very much to the disadvantage of the public.

The British Pharmacopœia has remained for years unaltered, during a period wherein new remedies by the score are being produced every month, which the public almost compel their medical attendants to prescribe for them. These remedies may be good or may be bad, may be invaluable in the treatment of disease or most insidiously harmful while appearing to do good, or may even be dangerous in certain conditions, although advertised as harmless. The only certain thing about them is the fact that there is no authoritative information for the guidance of the practitioner. Hence the anomaly that scores of drugs are in daily use by the medical profession of which the British Pharmacopœia has no cognizance.

A therapeutic institute in connection with the College of Physicians, from which might be issued monthly bulletins in regard to the physiological and medicinal action of drugs new

or old, would appear to be an absolute necessity. In addition to this a pharmacopœial committee might be well occupied in bringing the drug preparations up to date in prescribing form, so that the medical prescriber should not be driven by the cumbrous and nauseous forms of the present preparations to prescribe the convenient and tasteless wares of the advertising chemist, who is still further advertised in this way.

The actual dietetic value of artificial foods could nowhere be better tested than in asylums, whose inmates so often stand in need of the most digestible nutritive preparations.

That much practical knowledge of this kind is acquired in asylums at the present time there can be no doubt, but it is of the utmost urgency that this knowledge should be put on record, so that it be available to the profession at large.

This JOURNAL will gladly welcome contributions tending to advance this most important branch of science, in which the physician to a hospital for the insane should stand *facile princeps*.

Hypnotism and Crime.

The Paris *Journal* publishes an account of the "hypnotising" by Professor Liegois, of Nancy, of a woman named Bompard, who was convicted of murder thirteen years ago; at her trial Maître Robert pleaded that she had committed the crime while under the hypnotic influence of a fellow-criminal named Eyraud, who was executed. Maître Robert instigated the investigation.

The report in the *Journal* describes the woman as re-enacting the crime, her actions being photographed and her words taken down by reporters.

According to this, after many refusals, she only consented to take part in the crime on being nearly strangled by Eyraud—a somewhat peculiar method of hypnotism.

In this scene she is reported to have said, "He is strangling me." That she should speak of him in the third person is certainly peculiar.

The report, if correct, shows from internal evidence that if the hypnotic reproduction is reliable, the woman acted from

fear and compulsion, and not from hypnotism. The reliability of the hypnotism, however, in a case where there is such an intense motive for deception, needs accurate investigation. A cinematographic and phonographic record of the hypnotic story, reproduced at a month's interval, and without intermediate rehearsal, would probably go far to throw light on the question.

The Reorganisation of the Association.

It is unnecessary to refer at length to the new articles and bye-laws which have been adopted by the Association at the special meetings held in November and December. The Association is indebted to the Rules Committee for much arduous work, and to Mr. Wigan, the solicitor, for his careful and sound advice throughout these tedious proceedings. We believe that the constitution of the Association is now so framed as to progress with the evolution of the Society, and trust that it will be long suitable to an augmenting Association.

Lunacy Reform in Melbourne.

In the July number of this JOURNAL we referred briefly to the wrong done to Dr. Beattie Smith, and it is evident from the Melbourne newspapers that the incident has caused very severe comments on the Central Administration of the Victorian Asylums. We have already given a narrative of the events which led to Dr. Beattie Smith's removal from the post which he filled so well. The *Argus*, one of the leading papers of Australia, characterises the inquiry as a "Gilbertian arrangement," but it has its tragic side when the interests of the insane are considered. Radical changes have been recommended by the official visitors of the metropolitan asylums. The construction of Kew Asylum and the continuous overcrowding, rendering classification ineffective, are subjected to serious remarks. It is stated that an insufficiency of medical officers, nurses, and attendants adds greatly to the difficulties of management. We cannot find space to give all the details of

this report, but we note that it is recommended that the superintendent of each asylum should be responsible, and should act under the direction of a Board having complete control of the whole department. The *Argus* of August 1st reports that a deputation of nearly one hundred waited on Mr. Murray, the chief secretary, whose deplorable procedure throughout this affair has been the cause of so much evil. The deputation included prominent business men, clergymen, medical men, and others of standing and repute. It was introduced by the Lord Mayor, who advocated radical reform. The Bishop of Melbourne and many others generally corroborated the opinions of the official visitors in no restrained fashion. The upshot is that Mr. Murray has undertaken to present a Lunacy Bill to the Colonial Parliament, ungraciously enough, but still unable to withstand the popular demand. So far, so good; but Dr. Beattie Smith is still relegated to a position which he has not merited after so many years of conscientious service.

The Council of the Association have remitted these matters to committees—the maltreatment of Dr. Beattie Smith to a special committee of their number, and the proposed reform in the colonial lunacy law to the Parliamentary Committee. We trust that they will report their findings in due course.

IRISH ASYLUMS CONFERENCE.

An interesting meeting was held on November 25th and 26th in Dublin. It was designated a Conference of Asylum Committees, and consisted of selected members of those bodies, together with the medical superintendents of the district asylums or their deputies. The conference was promoted by the Committee of the Richmond Asylum (asylum for the Dublin district), and met at that institution. The attendance was large, the committees and the superintendents being well represented. Among the delegates from the former bodies were several clergymen. The Irish Local Government Act under which Asylum Committees are constituted permits county

councils to nominate on the committees of their asylums persons who are not members of the County Council, provided these persons do not exceed one fourth of the total number which each council elects.

The subjects which it was proposed to discuss were arranged under the following heads:—(a) Increase of insanity and the reasons thereof, especially those applicable particularly to Ireland; (b) management of the insane with reference to classification; (c) workhouse and criminal insane; (d) necessity for readjusting Government contribution; (e) asylum finance, with special reference to building loans.

The debates were conducted on the whole with considerable cleverness and ability, and with a harmony quite uncommon in Irish public meetings. Whether this was due to the soporific influences of the *genus loci*, to the grave and impersonal nature of the subjects discussed, or to the very marked ability and tact of the Chairman of the Richmond Asylum Committee, Mr. Richard Jones, who presided, it were hard to say. Perhaps all three influences were combined. Mr. Jones led off the proceedings on the first day by a short statement drawing attention to the increasing number of the registered insane, and to some other matters. The increase of officially recognised insanity, pressing everywhere, is certainly very remarkable in Ireland. In the year 1847 there were registered in the island 6180 insane persons, and the whole population was 8,176,124. In 1899, with a population of but 4,576,181, the number of registered insane had risen to 20,304, and at the end of 1902, with a still decreasing population, the number amounted to 22,138. "So they had the strange spectacle of a country steadily diminishing in population called upon to support a steadily increasing number of lunatics." Brief reference was also made from the Chair to certain financial questions.

Under Section A papers were contributed by Drs. O'Neill, of Limerick; Graham, of Belfast; and Drapes, of Enniscorthy. Dr. O'Neill discussed the causation of insanity, dealing with agricultural depression, intemperance, heredity, diet, etc. He thought that the terrible depression of affairs and the emigration of the young and healthy were directly or indirectly responsible for a large portion of the insanity which exists to-day. Dr. Graham, in a vigorous contribution, contended that accumulation, etc., did not account for the increased

number of the insane. The number of first admissions to the Irish asylums had increased in twenty-two years from 1925 to 3173. He discussed the relations of drink and heredity to insanity, arguing that both were scarcely to be regarded as causes, being themselves the index of mental degeneration. In the last forty years Ireland had lost by emigration about 4,000,000 of the mental and physical flower of the country. It was therefore not strange that degeneration should be on the increase. He thought with Professor Pearson that the remedy was "to alter the relative fertility of the good and bad stocks of the community." Dr. Drapes handled the statistics of the subject with his usual ability, deeming intemperance and heredity to be the most important of the causes that could be attacked; he argued that the people ought to be educated on these points and taught self-restraint. Physicians can do little except advise. Efficient action depends upon the people themselves. We understand the proceedings of the conference will be printed fully, and we hope to have an opportunity at a later date of reviewing these papers in more detail than the newspaper reports give us the means of doing now. Considerable discussion followed their delivery, and there was some talk of adopting a resolution embodying canons of advice for public guidance as to avoidance of the exciting causes of mental disease. Eventually, however, this notion was abandoned.

Family Care.—Asylums Laboratory.

At the afternoon meeting of the Conference on the 25th, the management of the insane being under consideration, Dr. Conolly Norman read a paper on "The family care of persons of unsound mind." His views on this subject are well known, so that it is unnecessary to dwell upon them. It may perhaps be observed, however, that he disclaimed any economic motives in recommending family care, which he looked upon as a development of non-restraint. He also pointed out that he has been pressing the subject upon public attention for many years. The Committee of the Richmond Asylum endeavoured about two years ago to induce Government to introduce permissive legislation on the subject. It

is abundantly evident from the remarks made in the course of the debate that the Irish authorities showed their usual unintelligent conservatism in this matter. It remains to be seen whether they will continue their *non possumus* attitude, or whether they will attempt to lead this or any other movement. It is, of course, quite easy to postpone the adoption of family care for a long time. Whether under existing circumstances that will be an advantage is a matter of opinion. But unless Irish local finance undergoes some remarkable transformation, family care will come. It will be a pity if it comes merely as a measure of pauper assistance (out-door relief). Dr. Finegan, of Mullingar, also read a carefully prepared paper on the question of "boarding out." As may be supposed from his use of this not very pleasing term, he dealt chiefly with the system as developed in Scotland, but he also referred to the great results achieved on the Continent in so many different countries and under so many different conditions. Dr. Finegan was very well received, and those members of the conference who were not already familiar with the subject were much struck by his arguments. In the discussion that followed the familiar observations as to danger and as to the popular fear of the insane were heard, but nevertheless the general feeling of the assembly was strongly in favour of giving family care a trial, and of endeavouring to obtain permissive legislation for this purpose. A resolution was unanimously adopted to that effect.

On the same day Alderman McCarthy, of the Dublin Asylum Committee, read a most thoughtful and excellent paper, which, though coming from a layman and one who disclaimed speaking with special knowledge, was thoroughly imbued with the true medical spirit, entitled "A Plea for the Study of Insanity by Pathological Methods." A resolution with which he concluded his paper was adopted with hearty unanimity, approving of the establishment of a central laboratory for the Irish asylums, and petitioning Government to make a special grant in aid of the maintenance of such a laboratory.

Fiscal Questions.—Auxiliary Asylums.

A number of fiscal questions, some only interesting to Ireland, and some, such as the proposed increase in the rate in aid

which might be made to apply elsewhere, were discussed on the second day of the Conference. With these very complicated matters we cannot deal at present, not having full details at our disposal pending the publication of the *Transactions*. An excellent paper, which has been published pretty fully in a local journal, was contributed by Dr. M. J. Nolan, but not discussed, owing to its coming last upon the programme. We hope to present an epitome of it to our readers at an early date.

The chief subject, however, which was dealt with on the second day was a description by the Most Rev. Dr. Kelly, Bishop of Ross, of the Auxiliary Asylum at Youghal.⁽¹⁾ This institution is to contain 450 patients, and is to be in charge of nuns. A non-resident physician in general practice is to visit the auxiliary asylum daily. The patients are to be provided by the Cork District Asylum at Cork, which is, we understand, some distance by rail from Youghal. We cannot find that there is any other link between the parent institution and the auxiliary than the fact that the same committee will provide the funds. The question came up appropriately enough on the present occasion on the day that was devoted to fiscal matters, and the statement was made that the Youghal Auxiliary Asylum would be managed at a cost not exceeding £15 per head per annum. The hope was expressed that a number of the insane who are now quite illegally confined in workhouses, and are wretchedly neglected there, would find their way into the new institution. It is not easy to understand how the condition of these poor people is to be bettered without the expenditure of more money upon them. The Irish Local Government Act provides that where an auxiliary asylum is established the contribution from the local taxation account (rate in aid) shall be 2s. per week per head. As this is but half what is received for each patient in a district asylum, the expenses must necessarily be kept down in order to make the scheme pay. We are glad to learn that it is proposed that the patients shall be fed in the auxiliary as in the parent asylum, and we gather that the clothing will be equally good. The chief economy will be in a very much reduced staff. There are to be at Youghal eight nuns, two charge attendants, four assistant attendants, one night attendant, one charge nurse, three assistant nurses, and one night nurse. It is fair to say

that this staff is only fixed apparently in contemplation of an initial number of 400 patients, which will be afterwards increased by fifty. The Bishop of Ross had no difficulty in showing that this staff would be cheap. A tremendous question for all those who are responsible for the safety and well-being of the unfortunate insane remains: Will it be sufficient? We think no one who has any knowledge of the history of the insane will be found to entertain a serious hope that it will. We know what large asylums provided only with visiting physicians were in the bad old days. We know what they are at present in any countries where this arrangement lingers. We know—and know as none others can realise—that the daily visit of a practitioner to 400 patients would be but a cover for systematised neglect. Dr. Kelly, who, besides being a “demon of finance,” is an able speaker and a debater of a high order, made an amusing point in comparing the daily visits of the physician at Youghal to the less frequent visits of the medical man in the case of certain patients in family care, but this in no way touches the real issue. We may remind our readers, by the way, of the recent regulation of the Scotch Commissioners that every workhouse or other institution in which there are 100 or more of the insane must have a resident medical officer.

Then as to the rest of the staff. Can anyone suppose that the number of nurses and attendants is sufficient, unless the patients are of a class that ought to be boarded out, and unless the asylum is to be worked as what is called in Germany an agricultural colony? Even then we doubt the feasibility of running it with such a staff. But the workhouse patients, whose sad condition the Bishop of Ross rightly deplores and compassionates, are largely frail, or senile, or unclean, or epileptic patients. Such folk require more attention than can be given by a small staff.

We are glad to observe that some of the earlier features of the Youghal scheme dwelt upon so forcibly by Dr. W. Graham at the Cork meeting (see *Journal of Mental Science*, October, 1901) have disappeared. We hear no more of the lay manager —“a respectable and fully qualified layman”—who was to conduct the institution. Also, happily, no more of “a few strong, vigorous women, neither squeamish nor over-refined.” That there has been a change of front here, and that something

has been learned by a more prolonged consideration of the subject, might justify more tender treatment of the unhappy Irish Lunacy Inspectors, whose supersession by the Irish Government in this matter is most triumphantly recorded by Dr. Kelly. At least they deserve his thanks for having retarded his favourite scheme till it appears in its present more developed and presentable condition. We hope it may not now miscarry, though we have our fears, but we could neither hope nor believe that any good could have come of the "few strong, vigorous women, neither squeamish nor over-refined." Our sentiments about these hypothetical ornaments of their sex would be most fittingly expressed by the adjectives whereby their promoter distinguishes them: "few," "strong," "vigorous," "neither squeamish nor over-refined."

If we were controversially disposed we might say that we rejoice and are glad because our Munster friends have seen that even although economy is the prime motive, yet it is not desirable to have an asylum managed by a "competent layman" to be "secured for a much smaller salary than even a junior medical gentleman;" but we prefer to put it otherwise, and to frankly admit that the afterthought by which nuns are to be placed in charge of the auxiliary asylum indicates that those who are responsible for this scheme have risen to a higher view than that which they originally entertained of the requirements of the unfortunate class which is to be dealt with. Nevertheless we feel bound to add that although we entertain the most profound respect for those high-minded ladies who devote their lives to the service of the poor, we do not know that they have either the training or the experience which would especially fit them for this very special work. We hope that further knowledge may cause those who, like Dr. Kelly, act from the best motives, and are accessible to conviction, to see with our eyes in this matter. The risk of going wrong is very great, for a religious order established in such a charge is practically exempt from all that supervision which the experience of every civilised country has shown to be so necessary when we are dealing with institutions for the insane.⁽²⁾ The Bishop is reported to have said at the Conference that though in medical and scientific matters he was prepared to subordinate his views to those of the doctors, yet when it became a question of dealing with the sick, the poor, and the imbecile

he took the standpoint of a layman, and felt more inclined to inflict his views upon them as a Christian bishop. We do not claim any mysterious powers for science. Science is knowledge. Knowledge is acquired by experience. We merely say that we who spend our lives dealing with a certain matter ought to know something about it, and as we have succeeded in modifying the lay view in some important particulars we hope to show those who follow us into this field that there is still something to be learned.

At the meeting which gives rise to these remarks, the representatives of committees seemed, from their speeches, to be generally, though not unanimously, in favour of auxiliary asylums of some kind. The asylum medical officers who took part in the debate, with one exception, spoke unfavourably. In the end a resolution was proposed by Dr. Lawless, of the Armagh Asylum, seconded by the Chairman of the County of Dublin County Council, and adopted in these terms: "That Section 76 (1) of the Local Government (Ireland) Act, 1898, enabling County Councils to establish and maintain auxiliary asylums for the reception of chronic and harmless lunatics at present confined in union workhouses, being practically inoperative owing to the capitation grant for patients maintained in auxiliary asylums being limited to a sum not exceeding two shillings per head per week, and it being desirable for the more humane treatment of such lunatics that such auxiliary asylums should be established and maintained, this Conference is of opinion that the capitation grant should be fixed at the same figure as that given for patients confined in district asylums, and that the Government be strongly urged to introduce legislation to give effect to this recommendation." We confess we are somewhat at a loss to understand the full bearings of this resolution, but it is well that the Conference expressed its dissent from the implied view of the Government, as expressed in the Local Government Act, namely, that certain classes of the insane can be maintained in institutions at one half the cost of the district asylums—a preposterous view, contrary to the experience of every country where such a division has been attempted. This resolution was adopted unanimously, as were all the resolutions which were submitted. There is certain convenience in this wholesale unanimity, but it is somewhat confusing to the reader of reports who may not happen to be familiar

with the Irish love for bringing about the happening of the unexpected.

(¹) As we go to press we have news of a further development of this scheme which is referred to at page 203.—(²) In connection with this aspect of the matter it may be instructive to our readers to peruse the case reported in our medico-legal column from an institution near Dublin. We are, of course, precluded from further comment, as the case is still *sub judice*. See also results in Italy, page 150 of this volume.

Intemperance.

In one matter there was practical unanimity among the members of the Dublin Conference. Evidence was offered from every side as to the disastrous effects everywhere observed to follow upon drink. It may cause some searching of conscience to ask whether our profession as a whole, and particularly our specialty, have up to the present taken a sufficiently leading part in the holy war against alcohol. It is high time for our Irish colleagues to make themselves heard upon this subject, when in at least one asylum one third of the male admissions are attributed chiefly to this cause. Since a French speaker, dealing with the increase of alcoholism in Normandy, told his hearers that one half the population lived by the sale of drink and the other half died by it, we have not heard a more witty and pungent mode of putting facts than that adopted by Dr. Drapes when he pointed out that "there is one lunatic or idiot in Ireland to every 178 of the present population, and one public-house to every 176!" Dr. Drapes observed that to the neurotic and the person disposed to drink every one of these ubiquitous public-houses was an ever-recurring suggestion. One of the ecclesiastics present said, with eloquence and justice, "We pray 'lead us not into temptation;' when we are told by the doctors of 'suggestion,' is it not the same idea in other words?" The want of courage and public spirit, which are such painful features in Irish life, render it unlikely that any early improvement is to be expected with regard to the issuing of licences. It is often said, probably with approximate accuracy, that in many Irish villages every second house is a public-house, and a story is told on good authority of an application made for a licence (and supported by the police!) on the grounds that the applicant was the only person dwelling on one side of the street who had not a licence.

That mental and physical degradation must follow from this state of things admits of no question. But every one in Ireland is afraid of the publican interest. It is like a penetrating fluid that gets everywhere, that is invulnerable to every attack, that crushes society by its diffused weight. The Bishop of Ross plainly charged the Government with playing into the hands of the publicans. He contrasted the apologetic attitude of the Irish licensed vintners at their meeting a year previously with their aggressive attitude at a similar meeting held a day or two before the Conference. He attributed the change to the action of the Prime Minister, who had promised to interfere with the power given to the licensing authorities by the laws of the realm. Mr. P. J. O'Neill, Chairman of the County of Dublin County Council, strongly denounced the Dublin Castle authorities for obstructing the endeavour to establish inebriate homes. Government in Ireland is doing its best to divest itself of every shred of authority, and (perhaps as a means to that end) of every atom of public respect; but of course it is not in that portion of the United Kingdom only that "the man in the street" recognises that Government is as much afraid of the publican as is the meanest borough councillor. In Ireland, however, the people have been more accustomed to look for light and leading to those who "govern," and are accordingly more astonished at the indifference of those "easy patrons of their kin" to the moral and physical ruin of the population. It behoves Irishmen to cease to lean upon a broken reed, and to work out their own salvation from the demons that beset them without depending on anyone. We only hope that our profession will aid the good cause in every possible way, and that if they can only "testify," they will testify as vigorously as Dr. Drapes has done. They will have, in spite of the publican interest, some measure of support, as is shown by the fact that at the Conference with which we are dealing there was an animated discussion as to whether the Government should not be petitioned to increase the Local Taxation Fund (out of which the "rate in aid" comes) for the benefit of asylums by increasing the charge for public-houses' licences. A resolution to that effect would have been carried by a very large majority but for the prevailing desire, already referred to, that every resolution should be adopted without division.

Part II.—Reviews.

*The Fifty-seventh Report of the English Commissioners in Lunacy,
June, 1903.*

APART from the points raised by a consideration of statistical details, the topics of major importance to which reference is made are the following :

Lunacy and the law.—The Commissioners, as the authority to whom has been entrusted the supervision of insane persons and the inspection of places sanctioned by law for their care and treatment, take the opportunity to express their views as to the extent to which certain suggested legislative changes may with safety be adopted. These suggestions have been put prominently forward in papers which have appeared in the JOURNAL during both last year and 1902, and have also been commented upon in leading articles of the JOURNAL. In the main they have for their aim greater elasticity in the legal formalities which have to be complied with before an insane person can be forcibly removed and confined. Doubtless this desire for greater freedom of action has to no small extent developed out of the comparatively complete degree of freedom from abuses which the lunacy law has been instrumental in bringing about. The Commissioners emphasise this view of the situation, and in temperate but strong terms warn those responsible that, notwithstanding the present purity of lunacy law administration, human nature remains very much as it was, and that any great relaxation in the reforming instrument would not in their opinion be wise. They quote *in extenso* the eight clauses of the section inserted in the Lunacy Bill introduced in 1900, dealing with a person suffering from mental disease where such disease is not confirmed. They point out desirable modifications in two of these clauses, and think also that permission might be given for the reception of voluntary boarders into single care, to be, however, followed by immediate notification to the Board, with power to visit and, if necessary, to determine such residence.

We are accustomed to not infrequently see the Scottish lunacy law held up as a pattern upon which the English one might be modified ; but in regard to this particular direction the Commissioners cogently remark that although there "the law already permits the treatment for six months without certification of persons suffering from acute or non-confirmed insanity, its success or otherwise can only be a matter of conjecture, as there is no provision for notification to the Lunacy Commission, and there can therefore be no official knowledge of the number of persons undergoing such treatment, or of its character or results."

Substitution of a new licensed house for one previously licensed, where the new one will be under a different licensing authority from the old one.—The Commissioners have obtained the opinion of the law officers of the

Crown as to whether they can grant a licence for a new house within their jurisdiction when the old house is within that of justices, and *vice versa*. The legal opinion of the answer to this question was in the negative. Alive to the inconvenience of this interpretation of the law, the Commissioners have drafted a clause for insertion, after approval by the Lord Chancellor, in any future Lunacy Act Amendment Bill which will remove all such restrictions as to locality.

Examination of patients at police courts.—The Commissioners again animadvert on the continuance of the custom, and enumerate fifty-nine places where examinations were so made in the past year—nearly twice the number enumerated in their previous report.

Fire at Colney Hatch Asylum.—A statement is made of this calamity, which took place during the early morning of the 27th of last January in the temporary buildings, which had been erected eight years previously with the very reluctant consent of the Commissioners and with the official approval, given on their advice, of the Secretary of State. They have since made a careful investigation of the temporary buildings at other asylums, and taken such steps as are within their power to limit their liability to danger from fire. They will in future refuse their sanction to the erection of similar buildings.

COUNTY AND BOROUGH ASYLUMS.

The number of these on January 1st, 1903, was eighty-two, and the Board was able to report in favourable terms upon their general condition and management. This number shows an increase of two, as compared with the previous year. This is accounted for by the opening of the new West Riding Scalebor, and the County of London Horton Asylums.

Scalebor Asylum has been erected for the reception of private patients, and has accommodation for 210. To a large extent it is a fresh departure in lunacy administration. Analogous accommodation had already been provided by several other public bodies, by the setting apart of certain wards or the erection of detached buildings in the grounds of their asylums. Notably is this the case at Dorset, Stone (City of London), Claybury, and the Manor (County of London) Asylums; we understand also that similar arrangements are nearly completed at the County of London Colony, Ewell, and at the Warwick County Asylum. But the West Riding County Council, so far as we are aware, have been the first public body to erect an asylum specially for this purpose. That it will be the pioneer of others there can be no doubt. For instance, if the need of such an asylum has been felt in the West Riding, with its between five and six thousand patients, there must, we imagine, be a so much the greater need, and with more possibilities, for such special and separate accommodation in the London county, with its over seventeen thousand patients.

The second mentioned new asylum, *Horton*, gives fresh accommodation to the county of London for 2000 beds. In plan it is almost identical with their asylum at Bexley, opened in 1898; the Medical Officers' quarters are, however, differently situated, and for the night

nurses a separate home has been provided ; the position of the villas relatively to the main building is also different.

Other new asylums.—Winwick, Radcliffe, and Sleaford have also been opened, but they replace or extend existing ones, and do not increase the total number.

Number of patients resident in these county and borough asylums.—Upon the year there was an increase of no less than 3749. Of the 82,009 patients on their books on January 1st, 1903, 1969 are described as of the private class. Having regard to the present interpretation of the law, whereby a patient whose means are sufficient to allow of the weekly maintenance charge being refunded, is entitled to be placed on the private list—in other words, where a re-classification has taken place,—it would be interesting to know the proportion of these 1969 cases who are thus classified as private in comparison with those who are admitted as private patients.

Post-mortem examinations.—The asylums in which an autopsy followed every death continue to be mentioned by name, a practice which we again venture to criticise as unfair. The asylum that fails to secure quite such complete records, owing—in, say, two or three instances—to the written objection to an autopsy made by the responsible friend of the deceased, is deserving of not less commendation than the three more fortunate ones specified.

Zymotic diseases.—Influenza, smallpox, scarlet fever, diphtheria, erysipelas, typhoid fever, tuberculosis, diarrhoea, and dysentery are those of which cases are reported.

Smallpox.—Thanks to the prophylactic measures taken, smallpox failed to gain any foothold in any asylum, even when the disease was rife in the neighbourhood.

Scarlet fever showed itself in eighteen asylums. The most noteworthy outbreak was one which commenced in November, 1901, and continued until the following May. It illustrated the great risk incurred by the absence of proper means of isolation and disinfection.

Typhoid fever.—Cases arose in twenty-two asylums, but it prevailed to any large extent in only one asylum. Though comparatively a new one, grave defects were discovered in the asylum drainage, and necessitated an entire reconstruction of the drainage. We have knowledge of at least two other new asylums in which, comparatively soon after their opening, serious defects in their drainage, necessitating similar extensive reconstruction, developed. The matter is one of such vital importance to any institution that it appears to us that it should be the invariable custom to obtain the services of a recognised expert in this special branch, both before the plans are settled and also during the actual construction of the drains.

Dysentery and diarrhoea.—Acknowledgment is made of the ready compliance by asylum superintendents with the Commissioners' desire to establish a record of the prevalence of diarrhoeal disorders. They publish some interesting facts and figures obtained from these valuable returns, but the system has been in vogue as yet too short a time to attempt any important conclusions. An epidemic at the Hants Asylum is detailed, which is interesting because, prior to 1902, there had been no death from dysentery in this asylum for upwards of ten years ; its

appearance closely followed upon disturbance of the soil due to the relaying of drains at the close of the year 1901. The observation is made that, grouping the asylums according to their size, it is manifest that the severer types of these affections prevail more in the larger institutions.

Tuberculosis.—The tubercular death-rate was higher in 1902 than in the previous year, being 18·2 per 1000 as compared with 15·8, and the proportion to total deaths being 17 *per cent.* as compared with 15·8 *per cent.* This 17 *per cent.* compares with 10·4 *per cent.* for the general population. The usual three tables are added showing the mortality from tuberculosis, the asylums being divided into those having (a) more than 1000 inmates, (b) between 500 and 1000 inmates, and (c) less than 500 inmates. We think it a point of great importance, in compiling these tables, to state whether the figures are obtained from the death table sent annually by each asylum to the Commissioners, or from the copy of the statement to the coroner sent in every case of death. The latter source, as it provides for the return of more than one cause of death, is of course much more complete than the former, in which one cause, and one only, can be returned. The same remark applies to the figures expressing the mortality from diarrhoeal affections.

We still hope that the Commissioners will see their way to bring about a similar general registration of tuberculosis cases to that of diarrhoea and dysentery.

The weekly maintenance rate shows a reduction of 4d. per head per week on the average weekly cost of the previous year.

Registered hospitals; institutions for idiots; State and criminal institutions; licensed houses; single patients and lunatics in workhouses.—The remarks made under these headings do not appear to call for special comment here, with the exception that, in the case of the last named, the arrangements for escape in case of fire were not as satisfactory, in the Commissioners' opinion, as they should be.

STATISTICAL TABLES.

Notified lunatics numbered, on January 1st, 1903, 113,964, being 3251 in excess of the number on the same day in 1902. This increase in 1902 exceeded the annual average increase in the preceding ten years by 837, and that in the preceding five years by 853.

Ratio of the insane to the population.—The figures relative to this are specially important, because for the current report it was possible to correct the population figures of 1902 and eight preceding years by the census returns of 1901. The above aggregate gives a ratio per 10,000 of the total population of 34·14 insane, or 1 in every 293 persons. This ratio has persistently, though not quite regularly, risen since the year 1859. It is to be noted that the increase has been practically confined to the "pauper" class.

Ratio of admissions.—Excluding idiot establishments and admissions due to transfers and readmissions due to operation of law, there were admitted in 1902 into single care and institutions for the insane 22,851

patients, of which 83·1 *per cent.* were "first" admissions. This represents a proportion of 6·93 per 10,000 of the population, and contrasts with 4·71 in the year 1869. The figure for the year 1901, as given in the previous Blue-book, was 6·4; it is not stated whether, in the light of the recent census, this was correct.

There is little or nothing in the way of any direct statement of opinion as to whether these increases in proportions imply an actual increase of insanity among the population. Table XVI clearly shows, as regards the age at which insane persons are admitted, that there is an undoubted increase in the ratio of the admissions aged 65 and upwards to the general population. The following table accentuates this:

Quinquennial periods.	Ratio of the admissions, aged 65 and upwards, to the population at that age-period.	
	Males.	Females.
1884-88	10·8	9·3
1892-96	14·1	11·7
1897-1901	15·6	14·0

It may be possible to explain this increase by reference to the unmistakable tendency to send persons of advanced age into asylums. It would be instructive were similar figures worked out for other age-periods; the most instructive groupings would probably be (a) under 25, (b) 25 to 44, and (c) 45 to 64. There can be no question that if, in working out these figures and proportions, "first attack" cases were separated from those "not stated to be first attack," it would be possible to speak much more positively on this vexed question as to whether insanity among the general population is really increasing.

Causes of insanity.—The tables dealing with these bring out nothing to which attention has not been commonly drawn before.

Epilepsy and insanity.—It is stated that about 12 *per cent.* of the inmates of asylums suffer from epilepsy. This figure, however, is obtained from the reports made on them at their inspections. It is a pity some simple form of classification of epileptoid cases is not made. At present it is customary in most asylums to group all cases (other than general paralytics) which have fits of any kind as epileptics. The senile case subject to epileptoid seizures, usually coincident with small coarse brain lesions, is essentially different from the true epileptic.

Recovery rate, in proportion to the admissions (excluding transfers and readmissions), was 36·13 *per cent.*, being a lower rate than in any previous year of the decade, the average of which (38·17) was lower than the average of any of the three preceding periods of ten years. The Commissioners think this fall may be in great measure due to the admission in recent years of more chronic and less hopeful cases.

Death-rate.—This in 1902 was 10·55 *per cent.* on the average number of patients daily resident, exceeding by 0·72 the average rate of the

decade, and is also higher than the average rate of any of the three preceding decades.

CHANGES IN THE COMMISSION.

The report concludes with an expression of regret at the resignation of Mr. (now Sir Charles) Bagot, coupled with the satisfaction which the Board feel in that he has since been appointed an honorary Commissioner, and that the value of his advice will thus be retained.

Forty-fifth Annual Report of the General Board of Commissioners in Lunacy for Scotland, 1903.

The trying ordeal of the census is over and its results published. How, with regard to the state of its mind, does Scotland come out of it? The best in a bad record is about as much as can be said, from which it may be possible to extract some consolation.

The addition of the term "feeble-minded" in the census schedule of 1901 has, it is rightly presumed, been responsible for much of the apparently considerable increase in the total numbers of the mentally deranged as compared with the figures of the 1891 census, and has rendered it impossible to draw any trustworthy conclusions as to changes in the actually existing lunacy; and all that can be done is, bearing in mind that this alteration of the schedule applies to the whole kingdom, to compare the changes which have taken place as they are found to affect its three divisions.

The results of the census may be summarised as follows :

	Mentally deranged.		Decennial increase.		
	1901.	1891.	Total.	Percentage.	Per 100,000.
United Kingdom	177,995	134,033	43,962	32·80	74·1
England and Wales	132,654	97,383	35,271	36·22	72·0
Scotland	20,291	15,462	4,829	31·23	69·6
Ireland	25,050	21,188	3,862	18·22	110·5

While the percentage proportion of the population of the United Kingdom resident in England and Wales increased in the ten years from 76·86 to 78·45, a rise of 1·6, the proportion of the mentally affected rose from 72·65 to 74·53, a rise of 1·88; the percentage proportion of population resident in Scotland rose from 10·67 to 10·78, or 0·12, while its proportion of mentally affected dropped from 11·54 to 11·40, a fall of 0·14; and Ireland's proportion of population dropped from 12·47 to 10·75, a fall of 1·72, its proportion of mentally affected falling from 15·81 to 14·07, a drop of 1·74.

The apparent increase of 69·6 per 100,000 of population which has

taken place in Scotland in the intercensal period is the lowest, comparing with 72 in England and Wales and 110·5 in Ireland, and with 74·1 in the United Kingdom as a whole. As regards the comparative prevalence of mental derangement in the three divisions of the kingdom at the time of the census, Scotland occupies the medium position, its proportion of those so affected to the whole population being 1 to 220, that for England and Wales being 1 to 245, for Ireland 1 to 178, and for the United Kingdom 1 to 233; so that all that can be said is that the worst record, as regards the decennial increase in proportion to population, is held by that division wherein the rate of existing derangement is highest, and the best by that holding the mediocre place.

The Lunacy Board of Scotland is again to the fore with a very exhaustive and most interesting section, extending over twenty-one pages, dealing with the "Extent and Distribution of Mental Unsoundness in Scotland, as deduced from the Census Returns for 1901." Nothing corresponding to this appears in the report of the English Commissioners, and it is to be hoped that they may be able to do something in this direction, and, despite the serious amount of work it would involve, not be behind either their Scottish or Irish brethren, the latter of whom hope to furnish a special report on the subject. The section referred to is, to our mind, the outstanding feature of this report, and is a most valuable contribution to the study of a subject of the greatest sociological importance. The census returns of this country afford no assistance in any attempt to estimate the prevalence of mental unsoundness, except in so far as regards its totality in each of its three divisions; and the Scottish Lunacy Board have attempted to supply, from the information in their possession and from the census returns, information as to the comparative prevalence of mental defect in the different counties of Scotland, and give carefully reasoned arguments as to the possible explanations of the great disparity in the existing mass of lunacy which prevails between the rural and industrial districts. An attempt is made to show that this disparity is probably more apparent than real, but the arguments adduced do not strike us as being very convincing. The occurrence of a larger proportion of quickly recoverable and of rapidly fatal cases would naturally tend to keep the existing mass of lunacy in the industrial areas at a low figure, but one cannot get away from the fact that the rate of occurring insanity is, and has always been, a high one in rural areas—much higher, we think, than can be accounted for by the supposed greater prevalence of non-acquired cases. The theory that "imbecility is, as a rule, the leading factor which determines the different proportions of mental defect in different parts of the country" is a doubtfully tenable one; and it is a question whether one is warranted in going beyond the statement that high proportions of lunacy and of imbecility are found to co-exist, and that the conditions which determine these are probably common to both. The view, too, that the lower proportion of imbecility found in industrial areas may find its explanation in the habitually higher death-rate among children, is based upon the assumption that the children so dying would have furnished, had they lived, such a proportion of feeble-minded as would have equalised the rates in these two areas—an assumption which it is impossible to substantiate.

In the discussion of almost any subject at the present moment it is about as impossible to keep the fiscal controversy outside as it was for Mr. Richard Babley to keep King Charles the First out of the Memorial. Politicians of whatever party, however at variance on the question of the country's trade, are almost without exception agreed on one point, and that is the disastrous consequences to the national physique which are resulting from the continuous depletion of the rural parts and the consequent increasing aggregation of the people in urban communities—what Lord Rosebery calls “the almost insane migration from the country into the towns.” The consequences are disastrous alike for the rural and for the urban communities. The causes in operation, whether free imports or not, are, it has been said, “destroying the very nursery of the race. They are breaking down its thews and sinews, and undermining its constitution by driving its population off the fields and immuring it in towns, where its stamina and its fecundity suffer cruel and irremediable degeneration.” There are some indications that deterioration is taking place at a more rapid rate among industrial communities than elsewhere, but this view, so far as mental derangement in Scotland is concerned, is not supported by the figures of Table X, which gives the number of pauper lunatics registered yearly in each county. From this table it appears that while the annual registrations show for the whole of Scotland an increase in the ten years 1893 to 1902 (calculated on the 1901 population), as compared with the preceding decennium (calculated on the 1891 population), of 7·8 per 100,000 in the five industrial counties, where the rate of existing lunacy is lowest, the increase amounts to only 6·2; while in the eight Highland and insular counties, where existing lunacy reaches its highest point, it amounts to 9·1. To all appearance the physical stamina of the Scottish race has enabled it to withstand, so far, the evil effects of industrial and urban life.

The really vital question, after all, is, as Mr. Chamberlain asked at Greenock, “All history is the history of States once powerful and now decaying. Is Britain to be numbered among the decaying States?” There is just as little room for self-complacency in this report of the Lunacy Board of Scotland as there is in the recently published report of the Commission on Physical Education. Whatever view may be taken of the fiscal question, the matter of the national physique is assuredly no party question. Though Mr. Asquith told his Newport audience that “every class of the community had advanced in material comfort, in moral progress, and in intellectual culture,” five days later he had evidently come to the conclusion that the time for the policy of “repose” had passed, for we find him telling the Ladybank people that “one good result of the fiscal controversy was that it compelled Liberals to scrutinise more closely, and to ask themselves what were the causes of, and the possible remedies for, the deplorable condition—for it was still a deplorable condition—of large numbers of their own people. Let them not ignore the black spots on their social and economic map.” The black spot of lunacy on the social map of Scotland, which had in 1901 become a little less sombre, has, in the year 1902, as was anticipated, become blacker than ever. It is the blackest on record. It may be some consolation to know that Scotland's record of occurring

insanity in this year is not so bad as that of England and Ireland, that its increase of lunatics registered for the first time is equivalent to only 2·9 per 100,000, while that of England is 4·5, and that of Ireland 8·8. Still, the fact remains that the rate for these in 1902, *viz.*, 62·8, is the highest recorded in Scotland in the past twenty-nine years.

We have dealt with the subject of Scotland's lunacy from the broad standpoint of the national health ; and there is no evidence, so far as we can see, that things are well from this point of view with the adult section of the nation, any more than they are with the children's physical condition, or that there is any prospect of betterment in the future. Scotland in lunacy matters has always been in the van of progress, and one waits with hopefulness for the advent of its pushful and far-seeing psychiatric Shuv-menébar, who will fearlessly tackle this insidious national ailment, which constitutes such a grave reflection upon what we are pleased to call our civilisation.

Fifty-second Report of the Inspectors of Lunatics (Ireland) for the Year ending December 31st, 1902.

The latest summarisation of lunacy statistics as given in this report only forces upon us the melancholy conclusion that we are, or seem to be, as far off as ever from reaching any finality in the increase of insanity. One year a reduction in the number of admissions encourages the illusive hope that we are at last nearing the turning-point, but the expectation is rudely dissipated by the returns for the following year. The number of our insane population continues its stealthy, apparently uncontrollable advance ; limit, so far, there is none.

The inspectors have to report an increase of 508 in the total number of lunatics in 1902, the corresponding increase for the previous year having been 461, an advance of 47. The numbers in district asylums increased by 700, as compared with 461 in 1901, a number equal to the average population of an Irish asylum. Private patients increased by 13, and Chancery patients in unlicensed houses by 3, while there was a decrease of 1 in Dundrum Asylum, and of 207 in workhouses. The admissions into asylums from workhouses numbered 879, an advance of 160 over those of the previous year, the percentage distribution of insane under care at the close of 1902 being, in asylums 79, in workhouses 16, and in private asylums and others 5 *per cent.* The intention of the recent Local Government Act that all lunatics in workhouses should be transferred either to district or to auxiliary asylums has so far failed of fulfilment. There is nothing like sufficient accommodation in existing asylums for all workhouse insane patients, and so far the Youghal Auxiliary Asylum remains a solitary instance of an institution of that class. The arrangements for the management of this institution determined on by the committee of Cork Asylum, who in the course they have taken appear to have been influenced mainly by ecclesiastical opinions, are not such as commend themselves to the medical profession, who will feel slow in recommending any further

experiments on similar lines. The asylum is to be under the control of nuns, without any resident staff, for which a daily visit from a local practitioner is considered a sufficient substitute. The accommodation is said to be for some 417 patients, and that such a large number should be confined in an institution without any provision for continuous medical supervision is a distinctly retrograde step, and that such an arrangement should have been sanctioned at all seems on the face of it a rather questionable proceeding on the part of the executive. The number of attendants in the scheme drafted out by Dr. Kelly, Roman Catholic Bishop of Ross, and which the committee have practically adopted, will form a proportion of about one to forty patients, which is wholly, and even dangerously, inadequate. The Bishop is sanguine as to the economical working of the institution, and estimates the cost of maintenance at about £15 per head, as contrasted with the average net cost in district asylums, which varies from £23 to £25 per head. The results of the first year's working will be awaited with interest, and not without some misgiving.

The figures of the past year are summarised as follows :

	On January 1st, 1902.			On January 1st, 1903.		
	Males.	Females.	Total.	Males.	Females.	Total.
In district asylums	9,133	7,747	16,880	9,508	8,072	17,580
In central asylum, Dundrum	146	24	170	149	20	169
In private asylums	323	409	732	335	410	745
In workhouses	1,560	2,186	3,746	1,458	2,081	3,539
Single Chancery patients in unlicensed houses	55	47	102	53	52	105
Total	11,217	10,413	21,630	11,503	10,635	22,138

"The only satisfactory feature in these figures," say the inspectors, "is the decrease in the number in workhouses," a decrease which amounts to the substantial total of 500 during the past four years, or an average of 125 per annum. Even at this rate it would take more than another quarter of a century to empty the workhouses of their insane inmates, but if accommodation is provided for them—as it probably must be before long—the transference could be quickly effected, with, let us hope (*pace* Youghal), their conditions of existence greatly improved, and the anomaly of keeping a large number of insane persons illegally detained in confinement put an end to. It should be mentioned that it is only during the past four years that the number of insane in workhouses has diminished, and even notwithstanding this there are still as many as there were twenty-one years ago, in 1881. It is more than probable that although a considerable number of workhouse patients were sent to asylums each year, their place was supplied

by the transference of lunatics and idiots who were at large to workhouses. From a table given on page 14 we find that during the last twenty years lunatics at large have decreased by 747, and idiots by 1,875, making a total reduction of 2,622. According to the census returns for 1901 there are still 7,700 lunatics and idiots either in workhouses or at large, and the problem which now has to be faced by the local authorities is how they shall provide accommodation for some 3,600 patients who are in workhouses, along with a certain proportion of those at large, unless the experiment of boarding-out insane is attempted. The plan of transforming disused workhouses is one which is sure to find favour with many committees on the grounds of supposed economy. From other aspects besides the financial one this method of providing increased accommodation for the insane is an undesirable one, and it is even doubtful if the anticipations as regards economy will be realised.

The great increase is, as usual, in the population of district asylums, and this increase is in rapidly advancing ratio. If we take the last twenty-five years, from 1877 to 1902, we find that the average increase in the daily average during the first five years was 213, in the second 218, in the third 339, in the fourth 476, and in the last 597. The admissions, as shown in a table on page 18, reached an unprecedented figure in 1902, being 375 more than in 1901. It is probable that a considerable number of these were admitted from workhouses, as these were 160 over the number admitted in 1901. The bulk of the increase was in first admissions, which numbered 3,173, or 352 over those of the preceding year, the readmissions numbering 774, with an increment of 23. This table would be enhanced by an additional column giving the ratio to population of admissions, or preferably of first admissions, which would enable an estimate to be formed of the actual increase in insanity with an approach to accuracy.

The recovery rate in 1902 was 34·5, being 2 *per cent.* lower than that of the previous year, and in Table viii. of Appendix A, which summarises the figures for the last ten years, we find that the average recovery rate for the latter half of the period is exactly 2 *per cent.* less than that of the preceding five years. This also is probably in a great part due to the increase in admissions from workhouses, a large proportion of such cases being incurable. With a reducing recovery rate and a stationary death-rate accumulation must advance in an increasing ratio, even if there were no increase in admissions. But, unfortunately, there has been a great augmentation of these in latter years, so that all the circumstances point to the necessity for providing largely increased accommodation in the near future. It is impossible to withhold our sympathy from over-burdened ratepayers in the difficult situation which confronts them.

From the report of the Census Commissioners, quoted at page 15 of the Lunacy Blue-book, we find that the ratio of insane to sane in Ireland has risen from one in 657 of the population in 1851 to one in 178 in 1901. The counties having the highest ratio were Waterford county and city, Meath, Clare, Kilkenny, King's, Carlow, Tipperary, and Wexford; the lowest ratios were in Antrim county and Belfast city, Dublin county and city, Londonderry county and city, Down,

Wicklow, Mayo, Fermanagh, and Donegal. The industrious habits, enterprise, thrift, and general level-headedness of some of the northern counties are thus seen to co-exist with greater mental stability than is to be found among the more indolent, impressible, and erratic temperaments such as are met with in the south and west of Ireland. It might not be safe to assert dogmatically that there is a necessarily causal connection between the two, but the fact is significant, or at least suggestive.

The death-rate was 7·7 on the daily average. Three hundred and forty-nine deaths were due to consumption, or 26·3 *per cent.* of the total mortality, the average for the past five years being 27·4; 44 deaths were caused by general paralysis, or 3·3 *per cent.*, the average for the past five years being 3·6. In both these diseases there would, therefore, appear to be an appreciable reduction. Four deaths occurred from suicide, four from misadventure, and one from homicide, the total being four less than for the previous year.

The very unequal incidence of phthisis in district asylums is a matter which has been commented on in these pages on previous occasions, and last year's returns demonstrate this fact in a remarkable way. In Belfast the deaths due to this cause formed only 5 *per cent.* of the total mortality, in Antrim 8·8, and in Carlow 9 *per cent.*; whereas in Waterford the ratio was 41, in Castlebar 45·6, and in Kilkenny 52 *per cent.* Belfast asylum having mostly an urban population we might have expected a large proportion of phthisical cases, but it had the least of all; and why in Kilkenny the disease should have been over ten times as fatal as in Belfast seems difficult to explain. If the death-rate from this cause amongst the sane population of the several districts were known, it might help to throw some light on the subject.

The inspectors consider that the sanitary condition of the district asylums has generally improved, and there has been only a very moderate amount of zymotic disease. The overcrowding in Monaghan and Sligo asylums is again the subject of strong comment, Monaghan having 105 and Sligo 154 patients in excess of their normal capacity. The condition of these two asylums in this respect is little short of a scandal, and it is no wonder that in the case of Sligo enteric fever has been more or less endemic for some years past.

Fifteen out of forty-six deaths amongst male patients in Belfast were due to general paralysis, practically one third, which seems an abnormally high proportion. Calculated on the total deaths, male and female, the ratio was 19 *per cent.*, whereas in the Richmond Asylum it was only 7 *per cent.*

As to causation, perhaps the most important consideration of all in connection with insanity, official returns are least satisfactory of all. And until the form of the table professing to give the causes of insanity is radically altered, and an enumeration of all the contributory causes is substituted for the present utterly misleading system of returning only one cause in each case, no useful result can accrue. The most a table of this kind can do is to give the *minimum* of cases due to a certain cause, which may have operated, even strongly operated, in a large number of other cases in which its influence is absolutely ignored. For instance, according to this table, hereditary

tendency only existed in 24 *per cent.* of all cases admitted. Few probably will be ready to endorse such a low estimate. Four hundred and fourteen cases are said to have been due to intemperance, a proportion of scarcely 10½ *per cent.*, which it is almost certain largely understates the real facts of the case. In nearly one fourth of the cases the cause is returned as "unknown," which is not altogether creditable to the sifting powers of some of the medical staffs. For instance, when in one asylum, Clonmel, the cases returned in which the cause was unknown were *nil*, in Downpatrick were only 3·2 *per cent.*, and in Londonderry and Antrim were under 6 *per cent.*, and when of all cases in some other asylums, which we refrain from mentioning, the percentage of "unknown" was as high as 35, 38, and even 57 *per cent.*, it is impossible not to feel that in these latter investigation into the circumstances of patients must have been of a very superficial character.

The reports on private asylums and on workhouses offer nothing for special comment.

The Irish Lunacy Blue-book has shown certain improvements in latter years, chiefly in the introduction of additional tables in the body of the report which are of great utility in enabling one at a glance to see groupings of statistical facts which, up till lately, had been merely stated singly in successive reports, and which necessitated a great deal of laborious searching when comparison between years or series of years had to be made—a concession for which we wish to make a grateful acknowledgment. But still these documents are far from having the direct educative effect upon the public mind which, as has been often pointed out in this JOURNAL, they might and ought to exert. Insanity is a great, a progressive evil. Its progress of late has been almost phenomenal, and the expense it entails upon the public almost insupportable. If it is to be held in check, this can only be done by educating the public, the man in the street, upon the subject. At present probably not one in 10,000 persons reads these Blue-books; they are looked on as works which merely concern officials. This is probably in part at least due to the form they take—a mere bald statement of facts, which is necessarily dry reading. If they could be cast in a somewhat different shape, if even a few paragraphs were interspersed giving some deductions and conclusions, and, especially, some suggestions such as the general public could take hold of and apply, some good results could hardly fail to follow. The text is little more than a paraphrase of the tabulated numbers, and corresponds to the writing in the body of a cheque, which is but a repetition in words of the figures at its foot. It is informing, no doubt, as far as it goes, but what we should like to see is more of an educative element in its contents. If something of this sort be not done there is danger of these reports continuing to be—what we fear they have been up to this—"*caviare* to the general."

Une Âme en Prison : histoire de l'éducation d'une aveugle-sourde-muette de naissance. Par LOUIS ARNOULD. 2^{ème} édition. Oudin, Paris, 8vo, 90 pp.

Under the poetic title of "A Soul in Prison," Arnould describes the case of Marie Heurtin, a girl blind and deaf-mute from birth. Born in April, 1885, she was the eldest child of her parents, who were cousins-german. The second child, a girl, described as almost blind, is now dead. Third and fourth, girls, normal in external configuration, but third is frail. Fifth, a boy, deaf-mute. Sixth, a girl, without apparent defect, died young. Seventh, a girl, blind.

It is to be observed that in this case, unlike the well-known case of Laura Bridgman or the case of Helen Keller, described at p. 543 of vol. xlix of this JOURNAL, the subject was born blind and deaf-mute. Only three such afflicted persons are at present known to exist.

The difficulties which might have been expected arose in the effort to provide for poor Marie. Deaf-mute institutions would not take her because she was blind; blind institutions rejected her because she was a deaf-mute. In one institution where she spent a short time her case was diagnosticated as idiocy ("idiocy by deprivation" no doubt it was), and she was recommended to be taken to a lunatic asylum. Though for the credit of our French colleagues we trust they could find some other means of managing a child—even a sane child—under ten years old than *la camisole de force et le cabanon* which our author seems to think she narrowly escaped, it was certainly wise to discard this recommendation. Happily the poor child was received by the worthy Grey Sisters (*Sœurs grises* or *Sœurs de la Sagesse*) into their establishment for the training of deaf-mutes and of the blind, Notre Dame de Larnay, Poitiers. These ladies had already had some experience in dealing with similar cases,—Germaine Cambon, deaf-mute from birth, who became blind at twelve years of age, and Marthe Obrecht, who became deaf-mute and blind at five years old, having been pupils in their establishments, where the latter remains.

The steps of Marie's education are highly interesting, and though the results have not been so brilliant as in the case of Helen Keller, yet too high praise cannot be given to the able and self-sacrificing nun, Sister Sainte-Marguerite, who devoted her time and intelligence to this work of charity and love. "Not a little girl of ten years came into Notre Dame de Larnay, but a raging monster. When the child found that she was left behind by her father and great-aunt she fell into a fury, which hardly abated for two months." These outbursts of rage, to which also Helen Keller was liable in the days of her "imprisonment," are remarkable. They are no doubt analogous to the pathetic outbursts of impotent distress so common in aphasia. As soon as Marie Heurtin had calmed down, Sister Sainte-Marguerite began her lessons. Noticing that the child had a particular fancy for her little pocket knife, she took it from her. Marie got angry. Then the sister, returning the knife for a moment, placed the child's hands over each other, crosswise, that being the abbreviated sign used among deaf-mutes to signify a knife. The child showed irritation, but as soon as she had grasped the idea of herself repeating the sign which she had been taught she was

finally given the knife. The first step had been taken : the child understood that there was a connection between the sign and the object. So with the next lesson. Marie was fond of eggs. Her breakfast egg was taken from her, and she was made to make the sign for an egg with her hands. She became cross, and would not make the sign voluntarily, and so she had meat instead of egg. Next day the same course was adopted : Marie repeated the sign that she was taught, and was given her egg. And so with bread and other foods. Shortly nothing was placed before her at table till she made the proper sign for each article, which she had quickly learned to do.

It is to be noted that this earliest instruction was teaching the child to signify a want by means of a single sign associated with the object wanted.

It now became necessary to alter the method, and to teach the pupil the dactylologic alphabet (finger language, the language commonly taught deaf-mutes before the introduction of the Milanese or lip language). Just as the mimic language of abbreviated signs, so this could only be taught to Marie through touch. Proceeding from the known to the unknown, the sister taught her pupil the equivalence that existed between the comprehensive sign which she had learned at first (say for knife), and the group of component signs which are, as it were, the change for it. This step achieved, the teaching of the alphabet was but a question of time and patience. The next procedure was to teach the correspondence of the dactylologic language with the signs forming the code of Braille (letters pricked upon paper), and thus the pupil was taught to read and write as the blind are.

At first, teaching was necessarily more concrete and material than it is with other children, but the time came to deal with abstract things, to make the child learn the adjectives, as Sister Sainte-Marguerite simply said. Thus, to commence with, the teacher made her pupil carefully handle two of her classmates, one tall and the other short, and thus inculcated on her the notion of size. In a similar simple way the idea of wealth and poverty was drawn from examples. Finally higher abstractions—ideas of death, of the Deity (this through the notion of Maker of all things), etc.—were taught.

It is to be observed here that while concrete words were first taught as signs whereby to express a want, abstract words were first taught as expressions of relation between one object and another. Was not the procedure in each case a necessity following the natural working of the human mind?

It has been suggested by a very able Italian reviewer of this book, and one who speaks from experience in working among the blind, that our belief that we have taught abstract ideas to the blind or deaf, who have been born with these disabilities, is often illusory. It is true that such people reproduce and even expand what they learn from us, but not having been spontaneously matured in the light combined from the diverse sources of sensory experience, these discourses of theirs, he says, are not sustained by any "idea." They are verbal *schemata*, of which the most elementary critical examination demonstrates the fatal inconsistency. In a way undoubtedly this is true. No real idea of musical pitch can be inculcated on one born deaf. No real idea of

harmony in colour will be formed in the mind of a man born blind ; and when words are used by such people to express such ideas they are counters and not true coins, they are symbols with no reality behind them. But if we take the very example given first in the work before us, the idea of "greatness" in a moral sense is expressed in every language by words that also and primarily mean bigness in a physical sense, and the latter idea can be attained by touch,—not perhaps as completely as when sight and hearing assist, but still sufficiently. All will agree, however, that to work such senses as remain is the only means at our disposal for opening and awakening the mind, and all must admire the patience, skill, and devotion with which the task was carried out.

Marie Heurtin has been taught not only the mimic and dactylic languages, the Braille and other methods of reading and writing, but also lip language. This she has learned, like Helen Keller, by touching the lips of her teacher. She does not appear to make much use of lip language. Her favourite methods of communication are direct converse with others by the mimic method (of abbreviated signs), made on the fingers and palms of a companion who sits hand in hand with her ; reading by the raised letters of the blind ; writing by the Braille method. It is evident that she is an apt and intelligent pupil, but there is no indication of that greed for knowledge and that marked literary ability which characterise Miss Keller. No attempt appears to have been made to teach Marie any language but her own. She writes French with grammatical accuracy, and her orthography is good. M. Arnould tells us that, as she was the daughter of a poor cooper, it was not thought desirable to educate her above her class. It seems to us that this question hardly arises, as it is impossible she can ever live in society or have any other environment than that of her convent home. She has been taught geography with the aid of maps such as are used for the blind, and on this subject she is expert. She has learnt arithmetic, at least as far as proportion, and does sums well. She has learnt history, sacred and profane, has wept over the blindness of Samson, has been moved profoundly by the story of Jeanne d'Arc, and writes in a letter to M. Arnould (December, 1902) that she is anxious to know about Ireland and Poland, since he told her of the persecutions in those countries. Pity and sympathy, as might be imagined from her own sad condition and from her surroundings, have been highly cultivated in her mind, and the sisters pride themselves on having sought mainly advancement in that religious and supernatural knowledge which cannot do harm, since it belongs to no class. As in the case of Helen Keller, the senses of smell and touch are said to be unusually acute. Probably they are really only more practised.

In discussing this most interesting story we may express some regret that the writer did not arrange his materials in a somewhat less confused way, and that he was not able to tell the tale of the excellent work of the Grey Sisters without the admixture of polemics. For this latter fault, perhaps the state of French feeling at present rather than the author's own taste is responsible.

CONOLLY NORMAN.

Motor, Visual, and Applied Rhythms (Psychological Review, Monograph Supplement). By J. B. MINER, M.S., LL.B. New York: Macmillan. Pp. 106, 8vo. Price 4s.

RHYTHM enters so largely into both the lower and the higher activities, mental and physical, that it is not surprising that its phenomena and nature have been extensively investigated during the past ten years. Among the numerous studies which have appeared Dr. Miner's must certainly take a high place, for it considerably enlarges our knowledge of the nature of rhythm and of the part it plays in practical life.

There are three main theories of rhythm. These, as summarised by Dr. Miner, are: (1) the theory that it is explained by respiration or other regular bodily rhythm; (2) the theory of attention, by which Neumann and others explain the grouping of rhythm by alternate strained and relaxed mental attention; (3) the theory of expectation and satisfaction, which is invoked by Wundt. Miner is not prepared to accept any of these theories in an unqualified form, but brings forward a "revised explanation" of a kinæsthetic character. According to this kinæsthetic theory rhythmic grouping is due to an illusion produced by the presence of movement or strain sensations, along with the sensations that are grouped, arising reflexly in the muscles under the influence of the external stimuli. It is these kinæsthetic sensations that are interpreted as a change in a uniform objective series, and a uniform series of stimuli is thus transformed into a series of groups of varying character,—that is to say, into a rhythm. The perception of grouping is thus not the direct result of the sensations from the outer world, but is read into them through the movement or tension of the muscles. The author does not claim that this theory is absolutely novel, but he has developed it and fortified it by numerous ingenious experiments. He thus formulates his main conclusions:—"Rhythm is the uniform perception of successive groups of objectively localised sensations, accompanied by a characteristic emotional tone (the sensations of movement and tension coincident with the perception of the objective series). The most pleasurable rhythm is that in which the kinæsthetic sensations are reinforced by sensations accompanying the regular bodily rhythms, *i. e.*, when the two coincide. Genetically, rhythm arose with the co-ordination of regular movement sensations and more rapid serial sensations. Biologically, it was fostered because serving the purpose of economy."

The first series of experiments was made with a metronome to supply the uniform stimulus, and a receiver consisting of a light sponge in a thin rubber bag connected with a Marey tambour. The bag was adjusted to the subject's hand, as it was found most satisfactory to register the movements of the hand or forearm. The subject sat with relaxed muscles and instructions to make no voluntary movements. Of fourteen subjects all but five gave reactions; they were all students or teachers, and familiar with psychological experiments. Subjective grouping was quickly perceived, and this was usually followed by involuntary and often unconscious movement of the hand or head. One muscle wave usually corresponded to two or three beats of the

metronome, sometimes varying according to the speed of the stimulus. One subject, even at the highest speed of the metronome (200 beats per minute), showed a separate muscle wave (nod of head) for each beat, a movement practically impossible to keep up voluntarily. Another subject, a woman teacher, who gave no response whatever in the normal condition, being unable to relax the muscles sufficiently, responded at once when put into the hypnotic state.

Rhythm is usually limited to the motor and auditory sphere. According to Dr. Miner's theory of its nature there is no reason why a uniform series of stimuli applied to any sense should not be felt as rhythm. He proceeded to test this point by throwing a uniform series of electric flashes, of slight intensity and varying speed, on to a screen. Of twenty-six subjects, most of whom did not know the object of the experiment, all but two found that the flashes fell into rhythm; these two also had difficulty in finding a rhythm with sounds. Although the light rhythm was thus so frequently perceived, it did not usually occur so readily as with sound, nor was it so well maintained. As with the sounds, it was found that apparent differences in the lights were correlated with bodily movement.

The author has also investigated the correlation between time-judgments and reaction-time. Do short time intervals seem longer to the quick person than to the slow? By investigating the exact correlation (according to Pearson's formula) among a group of 140 subjects it was found that those who have a slow reaction-time make the interval shorter than it is, so that we must suppose that a second seems shorter to a slow person than to a quick person.

A further inquiry was made bearing on the relation between rhythm and work, by testing the influence of rhythm in aiding or retarding the simple mental activity of distributing cards, and the more complex exercise of supplying words for blanks left in a poem. The interesting result was reached that slow people tend to find help from the rhythm, while quick people are retarded by it. This suggests that there is good ground for the belief that motor and auditory rhythm plays a beneficial part in stimulating the mental activity of the defective classes.

HAVELOCK ELLIS.

Le Goût. By L. MARCHAND. Paris: Doin, 1903. Pp. 330, 8vo.
Price 4 f.

The thoroughness with which Dr. Toulouse is covering the field in his International Library of Experimental Psychology is illustrated by the fact that he has devoted a whole volume to the sense of taste. The subject has been entrusted to an alienist (assistant physician at the Blois Asylum), who has previously done original work in the physiology of this sense. Dr. Marchand has carried out his task competently, and has packed a quantity of material into his book in an orderly manner, though it can scarcely be said that his treatment is masterly. He brings forward a great many facts and opinions, new and old, and his foot-note references to literature are very copious. Various little eccen-

trictities in these notes reveal, however, that in a large number of cases they are of a second-hand character, while several important investigations (such as those of Haycraft and Ayrton) receive no notice ; and it cannot be said that the author grapples very seriously with the fundamental problems of the precise nature of this sense. Notwithstanding these shortcomings, Dr. Marchand has certainly produced a useful monograph,—indeed, the only one at present in existence on this topic,—and it will be indispensable to all those who wish to take up the investigation of gustatory sensation.

The precise scope of the book will be shown by enumerating the titles of the chief chapters. The earlier chapters are devoted to the structure and histology of the tongue ; then comes a chapter on the mode of function of the gustatory apparatus, followed by others on the comparative anatomy of the organ of taste and on its embryology. The classification of tastes is then dealt with, and a full and satisfactory chapter is devoted to the measurement of gustatory sensations. In another chapter the evidence bearing on the cortical centre of this sense is brought together, and the final chapters deal with the psychology of taste and with the defects and perversions of gustatory sensibility in association with various mental and other disorders. The book is illustrated by numerous figures, diagrams, and tables.

HAVELOCK ELLIS.

L'Imagination. By L. DUGAS. Paris : Doin, 1903. Pp. 350, 8vo. Price 4 f.

Professor Dugas, who has undertaken the discussion of imagination in Dr. Toulouse's Psychological Library, is known as a thoughtful and suggestive writer of the school of Ribot, and perhaps especially by his notable essay on timidity. In the present work his debt is considerable to Ribot, whose book on creative imagination is certainly the most illuminative attempt to deal concretely with a somewhat rebelliously diffused and elusive subject.

This character of the subject comes out very clearly in the introduction to the present volume. The author defines imagination as "the spontaneous or reflective art of forming syntheses or mental combinations," corresponding to Bain's "constructivity." But thereupon he proceeds to point out that his own definition is incomplete, and that imagination must also be regarded as "the force with which the mind revives absent or vanished objects, or gives life to objects which have never existed, and are thus, in the strict sense, its creations." So that, he concludes, imagination has two characters, both essential yet quite distinct : force of objectivation and power of combination. So understood, it covers the whole of life, the highest and the lowest mental aptitude ; at one end hallucinations, illusions, and dreams, and at the other end the supreme achievements alike of science and of art.

It is impossible to attempt to summarise the contents of the volume, which is easy and pleasant to read, and, though neither very original nor very profound, brings together in an intelligent fashion many inter-

esting ideas and observations from various sources. The chapter on the scientific imagination may be commended. The authorities quoted are chiefly French; the only slip noted is a confusion between André and Gustave Lebon.

HAVELOCK ELLIS.

Le Mouvement. By R. S. WOODWORTH. Paris: Doin, 1903. Pp. 421, 8vo. Price 4 f.

This, the latest volume in Dr. Toulouse's Psychological Series, is said to be the first book devoted exclusively to the psychological aspects of movements. It is written by the "instructor" in psychology at Columbia University, already known as the author of one of the Monograph Supplements of the *Psychological Review* dealing with one aspect of the subject. Dr. Toulouse's choice has been fully justified, and the book fully comes up to the high—one may even say the increasingly high—standard which prevails in this series. The author makes no attempt to impart to his work any literary quality, to which, indeed, the subject scarcely lends itself. He is throughout clear, concise, and business-like, exhibiting a thorough knowledge alike of the literature of his subject and of the experimental work on which it is founded. His mind is clearly of predominantly critical temper, and he applies himself destructively to many theories which have obtained wide assent, such as the Müller-Schumann theory of the process involved in the perception of the differences between weights, and the doctrine of the central nature of muscular fatigue as based on the experiments of Waller and others.

The psychological study of movement is one of considerable importance, for it is now becoming widely recognised that every mental process has its motor side. This idea is always present to the author's mind, although it must be admitted that on account of the extent of the subject the book conveys a somewhat fragmentary impression. It is divided into two main parts: "Perception of the Movements of the Body," and "Production of Movement." In the first part the evidence in favour of the muscular sense is set forth and supported, as a genuine "sixth sense," and the semicircular canals are then studied as a sensorial organ, really a kind of "seventh sense," the sense of relation; the various errors and illusions in the perception of movement are dealt with, and Weber's law is discussed and dismissed as being too simple to account for all the complex phenomena involved, "neither empirically true nor typically true." The second part includes discussions of reflex action, dynamogenesis (the stimulating influence of sensations and ideas on motor action, as in Féré's well-known experiments with the ergograph), motor automatism, and muscular fatigue.

The value of a useful book is still further increased by indices and a classified bibliography covering six pages.

The translation has been executed from the author's MS. by Dr. Elvire Samfiresco, who seems to have performed her task in a highly satisfactory manner.

HAVELOCK ELLIS.

Part III.—Epitome.

Progress of Psychiatry in 1903.

UNITED STATES.

By Dr. BANNISTER.

THE progress of psychiatry in the United States is not a uniform one in all sections. It is notable mostly in spots. This is not a disparaging remark as regards the conditions in other sections, for they fairly hold their own. Considering the circumstances the conditions are in almost every region of the country fairly creditable. The asylums are well managed; the officers, while often appointed from political influence, are nevertheless able and competent physicians and executive officials. The assistants are usually selected from young men of promise, who desire experience in the subject of psychiatry. The great trouble is the lack of permanency of the position; hence the difficulty of building up a corps of highly accomplished specialists. To some extent I think this must be the case in Great Britain also, where I understand the assistants are not permitted to marry, and therefore can hardly, at least in many cases, consider their occupation as a permanent one. While I have no very striking investigations or epoch-making papers to notice, there have been many valuable scientific papers read before the American Medico-Psychological Association at its last annual meeting, or published in various medical periodicals throughout the country. Among these might be mentioned Dr. Spratling's work on brain surgery, the work of Coriat on general paralysis, and Dr. Lawrence's elaborate investigations on parietic dementia, which are only two or three out of a very considerable number of meritorious articles. Besides these there have been many valuable practical papers read before local societies by the officers of insane asylums, which, while usually containing nothing new, are nevertheless valuable summaries of information well adapted to the audiences to which they were presented.

Perhaps the most important publication bearing on questions relating to mental disease is the report of the Committee of Fifty on the Physiological Aspects of the Liquor Problem, an elaborate work of two volumes, covering the subject perhaps more comprehensively and fully than any other one that has been published. For a considerable time past the Woman's Christian Temperance Union, a very useful and respectable organisation, has been endeavouring to obtain legislation—and to a large extent successfully—requiring instruction in the public schools as to the deleterious effects of alcoholic drinks. The textbooks prepared for this purpose have been severely criticised by various medical men, and, to a certain extent, probably deservedly, though their wholesale condemnation is hardly justifiable considering the fact that some of them were written by such well-known physiologists as Martin, Hewes, and Hall. The first part of the work of the Committee

of Fifty gives a review of this question of instruction in regard to alcohol, and it is somewhat to be regretted that this chapter, written as it is by such able men as Professors Bowditch and Hodge, should not have been a little more judicial in its treatment of the subject. The condemnation is an absolute one, and the opinions of various physiologists, both in this country and Europe, are quoted as condemning the methods. There is no doubt that the work has been rather overdone in some cases, but the motive is a good one, and the question whether it is inadvisable to try to influence young children against alcohol in the early primary stages of their education is perhaps an open one. It is a little noticeable, too, that the opinions of certain prominent physiologists, English among others, were apparently not sought, or at least not obtained on this subject. The question of alcohol in this country is perhaps a more vital one than it is in Europe, and it enters largely into our politics, both State and municipal. While the advocates of prohibition and total abstinence are often extreme, their opinions are at least to be respected, and they have certainly done much good. At the present time it is probable that there are more total abstainers in the United States in proportion to the population than in any other civilised country, and this is largely, if not entirely, due to the efforts that have been made.

One or two interesting articles have been published of late in regard to the geographical distribution of insanity in the United States. One of these, by Dr. Wm. A. White,⁽¹⁾ was read before the National Geographical Society at the beginning of the year, and was based on the study of data authorised by the statistics of the tenth census. Dr. White finds that the proportion of insanity decreases rapidly from the New England States, west and south, until one reaches the Pacific coast, where there is a very marked increase, especially in California. The reason for this is given, as might perhaps be expected, in the stress of modern life, which is greatest in the more thickly populated districts; and it might be added that there is in the New England States, which have sent their best blood for a hundred years to other sections of the country, at the present time a concentration of heredity, which is especially favourable to the evolution of mental disorders. This is not specially noticed by Dr. White, but it is a fact to which I can testify from personal studies. The excessive incidence of insanity in California has been demonstrated by Dr. J. W. Robertson, who finds that at the present time the insane number 1 to 260 of the general population—certainly an excessive ratio. The great excess here as well as elsewhere is largely due to the foreign population, which, as Dr. Foster Pratt pointed out many years ago, while furnishing only a small percentage of the population, furnishes a very large percentage of the insane. The mild climate of California is also given by Robertson as a factor, as it favours long hours of working, and the stress of civilisation is certainly as strong in this State as in any other in the Union. Vacations are not the rule, the hours are long; and another cause which he considers to a certain extent responsible, and which has not been noticed elsewhere so far as I am aware, is excessive beer drinking. He asserts that neither whisky nor wine, though they may be more stimulating, are more damaging in this respect. It may be that, like the

cigarette habit, beer drinking is more dangerous because it encourages the habit of taking in very large quantities in dilute doses, than do the more obviously dangerous methods of imbibition.

Dr. Rollin H. Burr has also studied the question of the geographical distribution of insanity in his paper on the fluctuation of insanity in Connecticut, in which he finds that the ratio of the insane to the general population is larger than has been estimated, but the increase seems to be somewhat checked. In Connecticut the Irish seem to be the special victims of insanity, a fact which was pointed out by Sanborn for Massachusetts many years ago, and which, I think, agrees with the conditions on their native soil. It is a little curious, however, that the Irish immigrants to this country should show so large a percentage, being, as they must be, the more active and healthy of the race. We should look for more insanity to be left behind in the old country, where intermarriage and the culling out of the more vigorous would have had its effect; but it is a fact that in this country the Irish are notably numerous amongst the asylum population. What America has to stand from the influx of foreign defectives is perhaps not appreciated abroad. Some years ago I remember reading in the Commissioners of Lunacy's report of a specially disturbing patient, an American, in one of the Lancashire asylums. It was stated that an attempt would be made to send him back and relieve the country of his support. If reciprocity could be established in this direction we could overwhelm certain portions of the British Isles, to say nothing of Germany and Switzerland and other countries. I personally know men who have been repeatedly committed for insanity in Europe before coming to this country. Here they spent most of their time in the asylums. I also knew another case who was twice sent back to his own home, Germany, where his family was of the official class and well-to-do, and each time he was promptly returned.

The increase of insanity amongst the negroes of the South has also been a notable fact of late years, but this is not surprising considering the responsibilities of freedom which have been forced upon them, and their inability to meet the special strain which has thus devolved upon them. Perhaps it is remarkable that there are not more insane, especially paretic insane, in the coloured race than there are. I cannot recall a single case of paresis in a full-blooded or approximately full-blooded negro, though I have seen it in mulattoes; and the same rarity of tabes has been remarked upon by competent observers.

What may perhaps be a curiosity to British readers is the existence of a trades union affiliated with outside unions among the attendants of an asylum. Such at present exists in an institution in Cook County, Illinois, and active movements are made to increase the pay and privileges. How it will work is yet to be seen. There is a certain kind of civil service regulation of this institution, which is supposed to eliminate it from political "pull," but a union of the employes affiliated with outside unions is another kind of "pull," and may have unfortunate results. If there is any occupation which needs to be free from the objectionable features of trades-unionism, one would think it would be the care of the insane.

For lack of space, I can only mention here the work that is being

done in special institutions, such as the very ably manned New York Pathological Institute, the Shepherd-Pratt Asylum, and others; but space forbids. There is more intelligent psychiatric work, I believe, being done by asylum officers at the present time than at any former period, though their contributions are often widely scattered through various publications.

(¹) See digest by Dr. Wilcox, vol. xlix, p. 727.

DENMARK.

By Dr. A. FRIIS.

At the general census in 1901, in Denmark, there was also taken the number of insane and feeble-minded. The result has been recently published, and shows that the total number of insane has increased from 3794 to 4197, or 10·6 *per cent.*, during the past eleven years, whilst the number of feeble-minded has increased from 2712 to 3203, or 18·1 *per cent.* Since the increase of total population during this period has been 12·8 *per cent.*, the relative increase of insanity has been somewhat less; this, however, is made up by the great increase in feeble-minded. As regards the insane, the number of females was much greater than the males; four fifths of the whole number were living in asylums, and only a small number could support themselves outside. The male predominated somewhat in the feeble-minded; two thirds of the whole number were housed in asylums, and about 400 could support themselves by private employment, especially in agricultural work.

The need for more accommodation for the insane continues to be felt. To meet it the asylum at Oringe has been enlarged by the addition of an agricultural colony for twenty-five male patients. At Aarhus some of the chronic insane have been sent to the workhouse, which is near enough to allow of their supervision by the asylum superintendent. There is also a scheme to enlarge the St. Hans Hospital near Copenhagen.

The same need for accommodation is felt as regards the feeble-minded, and the directors have to refuse admission to a great many cases.

The care of the criminal lunatic and the criminal feeble-minded has again been the subject of discussion at the meeting of the Danish Association of Criminologists in Copenhagen, April, 1903, and also at the fifth meeting for the Care of the Abnormal in the Northern Countries in Stockholm, 1903, where I read a paper on the latter subject. The discussion has not so far led to any practical results.

In Denmark there are now three asylums for epileptics, all private institutions. The chief is at Tersløse, which has been enlarged several times, and has now accommodation for about 100 patients. The two others are only intended for children—the Nyborg Asylum for twenty boys, and the Rudo-Vedby Asylum for twelve girls.

Literature has almost been confined to papers in the journals discussing the accommodation and care of the insane, to some extent in

relation to the paper by Dr. Pontoppidan mentioned in a former number of the JOURNAL (1902). Dr. Thalbitzer has written on the "Manu-depressive Psychoses," and Dr. Wimmer on "Evolutive Paranoia."

FRANCE.

By Dr. RENÉ SEMELAIGNE.

Constitutional Psychoses.—Dr. Arnaud, of Paris, contributed to the *Traité de Pathologie mentale*, recently edited by Dr. Gilbert Ballet, a study of constitutional psychoses, which he successively considers among patients with a latent and an apparent predisposition to insanity.

In the first group there may appear primary systematised delusions, acute or chronic, and periodic or circular insanity. The second group produces obsessions and impulses, moral and reasoning insanity, and various delusions, *e. g.*, reasoning mania, melancholia, and persecutory delusions.

In the first group are found—

1. Acute systematised delusions presenting various forms.
 - (a) Simple and single attacks, sudden and unforeseen, which soon disappear.
 - (b) Successive attacks of delusions with essentially polymorphous manifestations.
 - (c) Attacks similar or dissimilar to one another in character, and separated by intervals of complete calmness.
 - (d) Accidental attacks during the evolution of a chronic delusion.
2. Chronic systematised delusions due to depression. This variety includes—
 - (a) Delusions of persecution with a systematised evolution.
 - (b) Delusions of persecution with self-accusation.
 - (c) Hypochondriacal systematised delusions or nosomania.
3. The expansive variety. This includes—
 - (a) Systematised delusions of ambition, or megalomania.
 - (b) Systematised religious delusions.
 - (c) Systematised erotic delusions, or erotomania.
 - (d) Systematised senile delusions.
4. Periodic or intermittent psychoses. These show, as a characteristic, more or less frequent and regular attacks of mania or melancholia, separated by intervals of normal or nearly normal mental health. Such psychoses include two quite opposite varieties :
 - (a) A genuine intermittent variety with attacks of a similar nature to one another, *i. e.* mania or melancholia.
 - (b) A circular variety without any lucid interval.

The psychoses among those with an apparent predisposition to insanity are characterised by disorders of the feelings, will, and power of self-control, more than by true intellectual disorders. Such patients often present physical stigmata, and generally have shown from childhood or puberty psychic signs of morbid heredity or degeneration. One

might observe reasoning mania, moral insanity, delusions of persecution without hallucinations, paranoia originaria.

Dr. Arnaud divides obsessions into two classes, *viz.*, inhibitory and impulsive, but a common basis is aboulia. In the first class are interrogative obsessions and phobias.

Insanity of doubt is a mental state characterised by special obsessions, such as incessant interrogations, an anxiousness for repeated verifications, and by an unconsciousness of the absurdity of such a state.

The *délire du toucher* does not consist of a disorder of the sense of touch, but is an excessive motivity. It is a genuine phobia where one is obliged to touch some object, but the emotion does not succeed the touch but precedes it, and often is caused by sight or thought. Every sensation, feeling, or idea may produce a morbid fear or phobia. There are three principal varieties :

1. Fear of object, place, or element, *e. g.*, fear of open spaces, or agoraphobia ; fear of closed spaces, or claustrophobia ; fear of height, or acrophobia ; fear of precipices, or cremophobia ; fear of fire, or pyrophobia ; fear of cosmic phenomena, or astrophobia ; fear of darkness, or nyctophobia ; fear of wind, or anemophobia ; fear of railway travelling, or siderodromophobia, etc.

2. Fear of pain, disease, death, or functional impotence.

3. Fear of living beings (anthrophobia and zoophobia).

Impulsive obsessions may be classified as follows :

1. Dipsomania, or irresistible proclivity for drinking ; and sitiomania, or impulse to eat.

2. Kleptomania, or irresistible impulse to steal ; pyromania, or impulse to burn.

3. Homicidal obsessions.

4. Impulse to suicide.

5. Onomatomania, or obsession of one or more words.

6. Coprolalia, or impulse to repeat some obscene words ; and echolalia, or impulse to repeat like an echo—words, or sometimes one's own thoughts.

Sexual anomalies and perversions may be divided into the following classes :

1. Exaltation of the sexual functions (nymphomania and satyriasis).

2. Genesic weakness (erotomania, which is quite psychical).

3. Genesic perversions, which are numerous, and having a character which is common to all varieties of this class, *viz.*, sexual satisfaction could not be obtained without interference with conditions which have no connection with the genital power.

Neurose d'Angoisse.—Dr. Capgras, Assistant Medical Officer, Lafond Asylum, reported observations taken from two cases of neurosis, especially characterised by anxiety, anguish, vertigos, and phobias.

The first patient, *æt.* 56, had been compelled to restrain himself during thirty years of his life, notwithstanding his violent desires. The anxious state induced a suicidal tendency. After several attempts at self-destruction the anxiety diminished, and the patient became sunk in melancholia,—without delusions, however, but with *tædium vitæ* and some hallucinations of hearing. The subjects of the second set of

observations were a man and his wife, who presented phobias, anguish, and attempts at suicide. The wife became insane and died in the asylum; the husband, after having severed the conjugal ties, did not present any new attacks of anguish.

According to the author, the *neurose d'angoisse* is an intermediate stage between neuroses and anxious psychoses.

Migratory Insanity.—Dr. Wahl reported three cases of migratory insanity.

The first patient, *æt.* 22 when admitted to the asylum, had been a wanderer since his infancy, having left his home and rambled over part of Europe. During his peregrinations he followed various callings, and from necessity was at different times rag-picker, street porter, dock labourer, mariner, etc. He was often arrested in the various countries through which he passed, and had been expelled from Belgium (thirty-three times) and from Germany.

The second patient, *æt.* 43, presented physical stigmata of degeneration. He was a lubric, exhibitionist, and pederast, and had been twenty-three times sentenced to confinement. He travelled in many countries to escape prosecution. Admitted to an asylum, he pretended to be injured and electrified. Contrary to those suffering from chronic persecutory delusions, whose persecutors, at first numerous and unknown, are by degrees embodied in a single individual, this patient began with one persecutor, who eventually multiplied to an enormous number. Hallucinations were chiefly sexual.

The third patient, *æt.* 33, showed mental degeneration, with systematised delusions of persecution, hallucinations of hearing, and ideas of grandeur. When he was a soldier he deserted and wandered from one town to another throughout a great part of Europe and Asia.

According to Dr. Gilbert Ballet, the most common type of *migrateur* is the wanderer going from one country to another; one also may observe *migrateurs* suffering from persecutory delusions, epilepsy, hysteria, and dementia. Some, however, are for the most part calm and quite normal, but suddenly, at times, feel the imperious necessity of going away, travelling for days, weeks, and sometimes months without ever looking at anything, and only go because they want to do so.

Dr. Briand knew a man who was troubled with an obsession for travelling. He worked during the week, and each Saturday evening he would go away, returning at midday on Sunday and resuming his habitual duty, having been without sleep for twenty-four hours. Another man used, every Saturday evening, to take the train from Paris to Brest, spend a few hours in the latter town, and return to Paris. His own son showed the same tendency to travel, but he preferred walking.

Dr. Chivet observed that some cases of circular insanity presented migratory symptoms.

Histology of General Paralysis.—According to Dr. Kleiffel, of Paris, general paralysis is a syndrome, and may be divided into three groups:

1. Inflammatory general paralysis having inflammatory disorders, sometimes going on to diapedesis.
2. Inflammatory encephalitis appears as a secondary infection.
3. Degenerative general paralysis, consisting merely of degenerative changes.

The author studied the histological changes in every group.

Dr. Anglade does not entirely agree with Dr. Kleiffel, but believes that inflammation of the brain substance is not primary, but secondary to lesions of the meninges.

Prof. Joffroy and Dr. Bombault report the *post-mortem* appearances seen in a case of general paralysis, which showed genuine syringomyelitis. According to them, the causes which produce the anatomical basis of general paralysis (*i. e.*, the inflammation of the brain) are unable to act efficiently when the nervous system has not a special predisposition. General paralysis is a degenerative disease.

Prof. Joffroy observed a genuine tabetic, who, after some months, showed all the mental symptoms of general paralysis. At the autopsy the histological examination confirmed the diagnosis, and showed the pathological lesions of both diseases, tabes and general paralysis.

Hallucinations in General Paralysis.—Drs. Gilbert Ballet and Vallon observed a general paralytic, who presented ideas of persecution with auditory hallucinations. He was hearing both good and bad “voices.” With the progress of the disease the ideas of persecution grew rather childish. He pretended to be injured by the voices associated with sound of the springs of the tramways, but was comforted by those of the springs of the arm-chairs.

Dr. René Semelaigne had the care of a general paralytic, *æt.* 42, who presented unilateral hallucinations of hearing. The patient successively heard buzzing noises, and then voices. He heard a man and woman singing, sometimes separately and sometimes together. The woman occasionally addressed the patient, the man did not. Two months after his admission to the *Maison de Santé* he complained of having a young lady in his head, just between the eyes, who conversed with him in a friendly way, was visited by her uncle, by a priest, and by a lady friend, who spent some days with her in the head of the patient. They went away, and the girl began to grow. While her head remained between his eyes, her feet came down to his stomach. Then she became quarrelsome, kicked, and threatened to eat his brain. Notwithstanding, the auditory hallucinations were as active as before, but more especially concerned the young lady. The patient heard voices of some of her relatives, and others who were desirous of seducing her. One night he heard the voice of his mother-in-law, who took him to task for neglecting her daughter and flirting with that unknown woman. He swore that he was innocent, but two new girls came to visit their friend, and all then suddenly disappeared. The patient for some days was calm and quiet, but there followed a violent agitation succeeded by grandiose ideas; he believed himself to be a king, the Pope, and gave millions to everybody, etc. etc. The grandiose ideas then vanished, and auditory hallucinations reappeared. Now he pretends to have a man and a woman in his stomach.

Hallucinations in general paralysis are not so uncommon as some authors believe; in this case they preceded all the characteristic signs, and now, when the patient is approaching dementia, they are always active, but have resumed a rather childish type.

GERMANY.

By Dr. J. BRESLER.

I am able to report satisfactorily, in the first place, on the further evolution of the question of public sanatoriums for nervous disease. It is well known that it was the pamphlet of Dr. P. F. Möbius on *The Treatment of Nervous Patients, and on the Foundation of Sanatoriums for Nervous Diseases*, 1895-6, which stimulated both the medical and lay world to the erection of sanatoriums for nervous cases of the lower classes. The first establishment of this kind was opened in 1899 near Teltow, several miles from Berlin, called "Schönow," by Dr. Laehr, with the co-operation of Drs. Oppenheim and Möbius, the banker Berl, and a number of charitable people. In October, 1903, Professor Cramer succeeded in persuading the Provincial Board of Hanover to erect a nerve sanatorium. It is right to mention that the Governments and Boards are not obliged to provide for this class of patient, making the departure at Hanover all the more significant. The city of Frankfort-on-Main has also commenced building for this purpose, and it is likely that during the coming year the Grand Duchies of Baden, Sachsen-Weimar, and the Rhine Province will follow. The consummation will depend upon the endeavours of alienists and neurologists, the aid of the Governments and Boards, and the assistance of public charity. It is unnecessary here to dilate upon the importance of the early treatment of neurasthenia and similar diseases in the prophylaxis of insanity, or the unsuitability of the general hospitals for this purpose, they being unable to provide suitable occupations and distractions, and also psychical treatment.

It is obvious from my previous reports that in Germany the question of the treatment of the excited insane without isolation in side rooms has been vigorously discussed during the last eight or ten years. In April, 1903, at the annual meeting of the Society of Psychiatry, Dr. Mercklin (Director at Treptow-on-Rega), in a report on the subject, came to the following conclusions, which were accepted by the Society:

(1) The isolation of the insane for therapeutic purposes is to be rejected.

(2) The so-called therapeutic isolation can, without great difficulty, be accomplished by other means, of which bed treatment, continuous baths, and separation are in the first rank.

(3) The use of narcotics cannot, in the meantime, be avoided entirely.

(4) Temporary isolation is only admissible in rare cases, and these are decreasing. The occasions are when the public weal calls for it and other means have failed.

It may prove a matter of some interest that it is proposed to establish a lunacy law in Germany. I reproduce here some excellent deductions made by Vorster (member of the Provincial Board of the Rhine Province, Düsseldorf) at the annual meeting of the German medical officers at Leipzig, September, 1903:—A lunacy law should deal with the efficient care of the insane and kindred classes of the community,

both within and without the asylums, and not limit itself to the prevention of false imprisonment. Regarding the latter, it is astonishing how strongly public opinion has been influenced by the utterances of well-known members of Parliament and others. It is stated that more than half the insane in the asylums are falsely detained, and that the committal to an asylum is the simplest way of getting rid of anyone whose existence is inconvenient or disagreeable! Legislation should not be influenced by such outrageous statements. In the German Empire there is no imperial lunacy law, and one is to be enacted to take the place of the existing country laws and prescriptions. From a judicial point of view it is necessary; from the psychiatric and hygienic standpoints it is at least desirable.

In framing an imperial lunacy law, Vorster states that the following principles should be insisted upon:

(1) The care of the insane is a public affair, and therefore a duty of the State.

(2) It should include provisions for the insane, idiots, epileptics, and drunkards.

(3) The countries should make the arrangements which are necessary for the execution of the imperial law according to the general maxims laid down by the Imperial Government.

(A) *Prophylaxis*.—The suppression of the excessive use of alcohol, of the abuse of morphine and similar drugs, and of the propagation of syphilis.

(B) *State's provision for the insane*.—The establishment of rules for the general care of the insane within and without the asylums, in families and in hospitals. The private asylums must be taken from under the imperial trades law and placed under the lunacy law. It cannot be recommended to turn the public asylums, which are the property of the provincial Governments and cities, into State institutions, because decentralisation in self-government has proved itself to be useful. The law must ensure that a sufficient number of asylums are provided. In Prussia, for instance, lunatics increased from 18,895 in 1880, to 43,411 in 1895. Idiots, alcoholics, and epileptics need special provision, but the last can, under certain circumstances, be housed in ordinary asylums. Criminals who become insane should be placed in annexes of the larger penitentiaries, and should be under the care of experienced psychiatrists. Feeble-minded people who come in collision with the penal laws should be sent to special State custodial institutions, which must be provided. The direction of the asylums for the insane, idiots, alcoholics, and epileptics should be in the hands exclusively of physicians. There should be regulations regarding the conditions of service of asylum physicians, and their ratio to the number of patients. Under the imperial lunacy law the education, discipline, and social position of asylum attendants must be defined.

(C) *Protection of the insane*.—It must be admitted that the legal basis for the compulsory detention of the insane is not everywhere satisfactory. The lunacy law must therefore contain legal enactments for the reception, detention, and discharge of patients. In the interests of efficient treatment the greatest endeavour must be made to ensure shortness and quickness of admission formalities. As a rule the head

physician of the asylum should decide whether a patient should be admitted. The decision of any other person is not to be commended. To prevent unjustifiable detention, in addition to rigorous Government control, the most efficient means is the immediate appointment of a guardian for every case admitted against his will. The Solicitor-General should be charged with the official protection of all lunatics. Patients should be discharged as soon as possible, and the law must see that no patient is detained for any reason other than is scientific and psychiatric. Shortness of accommodation or funds should not occasion the premature discharge of patients still needing treatment. There must be a sufficient number of expert members or Inspection Boards.

In conclusion, it is hardly necessary to draw attention to the meeting of the International Congress on Alcoholism, held this year at Bremen, which has already received much public notice. The presidential position was held by Dr. Delbrück, a well-known alienist in Germany, where the question is receiving earnest attention.

ITALY.

By Dr. GIULIO CESARE FERRARI.

One readily sees in Italy, and perhaps also the same may be observed in other countries, that there is a considerable disproportion in the respective development of the two branches of the problem of psychiatry. For, whilst the Italian alienists are not only as advanced as those of other countries in the scientific study of the different questions of psychiatry, and have taken the lead in certain branches (for instance in the work on criminal anthropology by Lombroso, the cerebral histology by Golgi, Marchi, etc.), they have taken but little notice of, at least up till recent years, certain practical questions (which, besides, have been long under discussion) of the special treatment of the insane. Thus, for example, we still lack a universal law regarding the treatment of the insane, whether in asylums or not.

It would take us too long, and would not be of much benefit to the readers of this JOURNAL, to seek the various causes of this fact, which is really a moral advantage to us, because, in the absence of a law for which we clamoured so long, abuses such as arbitrary detention, so often complained of in other places, are rarely met with here. Since our last epitome, however, something of this character has happened, which it seems right to mention here, as it has resulted in real progress in our country.

The provinces of the Veneto (Venezia, Verona, Rovigo, Vicenza, Treviso, Udine, etc.) have for nearly forty years had two asylums on two islands near Venice, one at St. Clement's for women, the other at St. Servolo for men. Following the ancient statute of the Veneto regarding the treatment of the male insane, the latter asylum was entrusted to a brotherhood, the "Fate-bene-fratelli;" but these, with an incredible carelessness, have allowed things to slide in a fashion shameful from a humane and moral point of view, and administratively ridiculous.

Inquiries have frequently been made into the organisation of this asylum, but either the incompetence of the investigators, or the clerical element which was so dominant in Venice, has rendered them fruitless. During the past year, on account of very serious rumours which were current, a new commission of inquiry was constituted, with Professor Belmonto, the eminent Director of the Clinique in Mental Diseases at Padua, as adviser. The skill of the latter and the absolute honesty of the members of the commission succeeded in overcoming the network of private interests which concealed the true state of affairs. The publication of their inquiry created an enormous uproar.

To sum up, there were found at St. Servolo patients chained in the same barbarous instruments which Pinel had stripped off in 1793 from the patients in the Salpêtrière; there was no sanitation, the moral *abandon* of the patients was complete, and administrative abuses were numberless.

Public opinion, powerfully assisted by the public press, forced the hand of the Government, who at last substituted in all the departments of this asylum a lay for a clerical administration.

The influence, not of the scandal—for St. Servolo was the only asylum where such horrors were possible,—but of the cry of disgust from the public conscience, was most beneficial. It doubtless contributed more than any other consideration to the almost complete suppression of all forms of restraint, which, although in a much more humane form, still actually existed in a number of our asylums. The fact that of seventy-seven patients who had been chained up for years, seventy could be completely liberated in one day without the least danger, could not fail to have most remarkable influence.

The truth of the old adage, "*Oportet ut scandala eveniant*," has been shown once again, and not only in this case, as we shall presently see. In fact, after a discussion, both prolonged and bitter, between Professor Tanzi, director and superintendent of the provincial asylum at Florence, and the *committee* of the same asylum concerning the limits of the medical director's authority, Professor Tanzi believed it his duty to send in his resignation. The matter produced an enormous outcry at the time on account of the foregoing events, and also because of those interested in the question; and the Society of Italian Alienists (*Società freniatria Italiana*) intervened in the debate, proposing and adopting a resolution which showed the Government the necessity of passing the famous law for asylums which has been under consideration for so long.

The questions whose solution we so anxiously await are two especially—that of the authority of the medical director, and that of the department responsible for the daily maintenance rate.

The first question has a very considerable moral value; it is so important in the internal administration of the asylums, a point which need not be insisted on in this JOURNAL. It is a question naturally of taking away the lay direction of the administration, which always tends to limit expenses, or at least to regulate them in a non-technical manner, and often in opposition to the skilled judgment of the medical superintendent.

The second question is also grave enough, for it can influence in a

very marked way the progress of treatment throughout the whole country. The maintenance rate is now paid by the administration of different departments (Province). The local administration of the "Comuni" have not the least check on the class of patient sent into the asylum. Any person of unsound mind, even the most quiet—imbeciles, epileptics, even those who are known to be absolutely harmless,—may be sent in where they are maintained by the provincial administration. From this cause there is a constant progressive increase in the number of insane, and a constantly increasing weight on the provincial administration.

There are some who would charge the local authorities with a portion of the maintenance rate of all the patients, or the whole rate for the chronic and harmless patients. But as the Communes are nearly always very poor, either of these courses would result in an automatic deterioration of the hospital surroundings of these patients.

One would hope, then, that the new law will charge the maintenance to the big councils of the provinces, if they cannot be charged to the State, as is done in France at the present time.⁽¹⁾ The asylum service is quite a special thing, and, being a public service, cannot be compared with a charitable institution.

There is one last question which the scheme of the law proposed by the Government settles badly, and that is the supervision of the asylums. According to the proposals, they are actually going to form local committees, half administrative and half technical; whereas, considering our geographical conditions, it would have been preferable to form a central bureau of inspectors, whose competence and authority would be generally recognised, and who would serve for the whole country.

One step has been made this year in this direction on the occasion of the Venetian scandal, and although it was a local fact, it should be noted. The Government has nominated Professor Belmondo, who made the very searching inquiry into the circumstances of St. Servolo, Inspector-General of the Venetian asylums. It is, however, only a well-constituted and central board which can give to the public and the asylums of all Italy that mutual confidence which is so necessary for them.

Before leaving the question of the asylums I should like to mention that in January, 1904, there is going to be opened the first asylum in Italy which will be reserved for acute cases only. It has just been built at Udine, near the Austrian border, and Dr. Antonini, formerly director of the asylum at Voghera, is going to be director. I would also remind you that around the asylum of "Reggio Emilia" has grown up the accommodation of the insane by entrusting them to family care according to the system initiated by Professor Tamburini and revealed at the Congress of Anvers in 1902; but I hope to succeed in the formation of an inter-provincial colony on the family system for the two departments of Reggio Emilia and Parma according to the Lierneux type.

It is worth while saying a few words about the formation by Professor Tamburini in his asylum at Reggio Emilia of two practical schools, one for those incapacitated in the course of service, the other for the young men and women who hope to follow this calling; the first school follows what I have seen in the asylum of M. Deventer at Meeren-

burg, in Holland, the second the teaching and experience of Professor Bourneville, of Paris.

The scientific zeal of our young alienists has been this year again very keen. Unfortunately I have here no space for more than a summary. I will give it in the section of bibliography and review in this JOURNAL, for it is a contribution of sufficient worth. Besides, I am waiting the complete publication of a work by Professor Tanzi, to review three treatises of mental diseases which have marked this period—by Professor Belmondo, of Padua; by Professor Bianchi, of Naples; by Professor Tanzi, of Florence. It is apparent, also, that the intellectual movement in the field of psychiatry among us is considerable.

I will finish with some of the arguments connected with the subject of this epitome. The movement for the instruction of backward children (idiots, imbeciles, etc.) is gradually organising in a definite direction. I have been appointed to direct "*L' Istituto Medico-pedagogico Emiliano*," now moved close to Bologna, where are gathered already 300 children coming especially from the provinces of Emilia and Romagne, with a great preponderance of morally backward children (the idiots do not number more than seventy, and even these are chiefly educable).

"*L' Istituto Toscano Umberto I per fanciulli nervosi e tardivi*," of Florence, supervised by Professor Tanzi and directed by Dr. Modigliano, has also been moved. It is now in a magnificent situation in the same town, and can accommodate fifty children.

"*L' Istituto pei Frenastenici*," of Rome, at last possesses a position worthy of direct affiliation with the "*Lega per la protezione dei fanciulli deficienti*," and for this the entire credit belongs to Professor Bonfigli. Here it is well to record to the honour of our country that "*Scuola magistrale ortofrenica*," directed by Dr. Montesano, continues to furnish to the special schools for backward children, and to the different institutes for imbeciles and idiots, an excellent staff trained for this purpose.

Again, the advanced course of scientific teaching of Dr. Pizzoli at Crevalcore (Bologna)—of which I spoke at length last year—has been attended by 100 masters and mistresses from different schools with a marvellous zeal and diligence. Dr. Pizzoli has invented an apparatus for the examination and education of the senses and for the psychological investigation of children, which presents great opportunities for studying not only normal children, but also those who are mentally deficient. Also I wish to record the good results which I have obtained at an adjoining school which I have founded near the elementary schools of Reggio Emilia. The conditions in the past year have been particularly unfavourable, but nevertheless, of twenty-two children sent as incapable of learning for divers reasons, only two have been found to need the special care of institutes for the backward. Of the twenty remaining, only three had to spend an additional year at the adjoining school. As to the other seventeen, a few have in the course of the academic year passed their classes in which they have continued their course, keeping well up with their old companions; the greater part presented themselves only for the final tests of their classes, with results very satisfactory and very encouraging.

Although it does not really belong to the field of psychiatric progress, being the direct development in a practical field of the school of criminal anthropology of Professor Lombroso, I think it will be useful to announce that Dr. Ottolenghi, professor of legal medicine at the University of Sienna, has just started near the Ministry of the Interior at Rome a "course of scientific police lectures," which will help to give to the policemen who are commencing their career, difficult as well as delicate, the most essential principles of biology, anthropology, and psychology, using also the practical teachings of the most clever and celebrated policemen. The object is to make young policemen understand the rational method of application of scientific facts practically (leaving aside all theory), and especially their application to criminals and to the manifestations of their criminality. It is a school which differs completely in its object and in the means it employs from the "Bertillonage" of Paris, and which can certainly give excellent results which it will be hurtful to ignore.

It will doubtless still more interest the readers of the JOURNAL to know that the pupils and admirers of the great scientific work of Camilo Golgi have collected in three great volumes, under the title of *Opera omnia*, all the works of this indefatigable investigator, who has opened the gates of histological examination of the nervous system. There are twenty-nine papers, which occupy 1257 pages, illustrated by fifty-one plates, and which represent the life-work of a man who has deserved well not only of his own country, but of science at large.

(¹) The next congress of the Società Freniatrica Italiana, which will be held at Genoa in 1904, will have for discussion a paper on "The Assumption by the State of the Care of the Insane."

SPAIN.

By W. COROLEN.

Dr. Giné's most regrettable decease has been a great blow to Spanish psychiatry, the well-known professor being a pioneer of progress and an apostle for phrenopathic teaching. He was the first to give clinical lectures on insanity at his asylum of New Bethlem, and one of the rare Spanish authors in this subject. At the present time no course of mental diseases is provided in our universities. Dr. Vera in Madrid, Dr. Galcerán in Barcelona, and a few others have given occasional lectures and practical demonstrations, but this year, unfortunately, even this little contribution has been denied to Spanish students. Street riots have postponed the compulsory *curricula* of dermatology and ophthalmology. The poor science of Pinel and Esquirol, Pritchard and Crichton-Browne, because of its absence from the scheme of improvement, could not even be postponed. A few scattered ideas emanating from the chair of forensic medicine are the only material furnished to the future practitioners. That such a state of things is very reprehensible all agree, but nobody takes the steps which would put an end to it.

A most satisfactory advance has been made by Drs. Galcerán and Rz. Morini by the publication of the new *Phrenopathical Review*. The

aspect of the little journal is humble, and its aims are not very lofty, but it will be, however, of good service to physicians who need a brief and accurate account of phrenopathic subjects. A well-reasoned article by Dr. Galcerán about Siscar's case has excited much interest. Siscar, who murdered his mother, was tried by jury as responsible for his actions, but several experts maintained him to be a moral imbecile.

Public outcry resulted in a sanitary campaign in St. Baudilius's Asylum, where the lunatics died like flies from typhoid fever. The investigation showed a deplorable state of the water-supply in the establishment, and ended in effective improvements. We should not leave the question of lunatic asylums without mentioning the opening of a new asylum at Reus (Tarragona province), where the most modern requirements are provided. The asylum, a remarkable work of Sen. Domenech Montaner, one of the best Spanish architects, will be much appreciated in Spain, where the number of asylums is so small, actually people from all provinces come to Leganés, near Madrid, or to St. Baudilius or Holy Cross Hospital Asylum, which is very expensive.

The statistics for insanity in Spain have not yet been published. The last census, in 1887, did not refer to them. This year the Statistical Institute proposed to bring together and print the particular intelligences of lunatic asylums. With reference to the Holy Cross Hospital, the average number of patients is 250 men and 300 women. Alcohol is not here so prominent a factor in the causation of mental disease as in Northern Europe. Syphilis, which increases yearly, explains the great number of general paralytics. Epilepsy is also very frequent. The clergy and navy contribute largely to insanity as well as business men and artisans. The average middle class is not so much affected as the higher classes. This year three descendants of noble Catalan families have been sentenced for robbery and murder, Siscar amongst them. The lower classes show an increase, owing to the frequency of strikes, the industrial crisis, and the over-population of the great metropolis.

Despite the eloquent work of Dr. Xalabarder on criminal lunatic asylums, urging their adoption in Spain, nothing has been done nor even projected in this direction. The aged Minister for Justice, Montilla, introduced, however, the Crofton system in prisons. The first plans (1859) of the Holy Cross Hospital provided this important section. Years passed away; Dr. Pi Molist, the founder of the model establishment, died, and with him the section alluded to. The new asylum is almost finished at St. Andrew's, a suburb of Barcelona, and it makes *no* provision for criminal lunatics. Neither the authorities nor the Institution of Charity have thought of this dangerous class of alienated. It must, however, be borne in mind that there is the Durán Asylum for unruly children, which is due to the philanthropy of the late millionaire of that name.

No books on mental science have marked this year. The student must content himself with perusing those already published, and with reading translations. These, by-the-by, are not numerous in Spain, owing, as the printers say, "to the little interest taken by the public." Is not "the dislike of the public" in a large measure ascribable to the scantiness of modern and valuable mental scientific treatises?

Epitome of Current Literature.

1. Anthropology.

The Median Occipital Fossa [*Intorno alla fossetta occipitale mediana o vermiana*]. (*L'Anomalo*, anno ix, Nos. 2—6, Febr., 1903.) Zuccarelli.

In the earlier discussions of the doctrines of Professor Lombroso a good deal was heard of the median occipital fossa, which the new school regarded as one of the unequivocal stigmata of the *reo nato*, as an atavistic character connecting the criminal with primitive and savage man and with the anthropoid apes. Some difficulty was, however, experienced in making clear the relationship of the condition to crime, and even so friendly a critic as Professor Benedikt had to confess that to his mind a large vermian fossa suggested mainly a marked development of the occipital sinuses, and should therefore imply, if anything, a tendency to piles rather than to homicide. Subsequently this stigma seems to have been a little under a cloud, but latterly there are signs of its again coming to the front. Lombroso himself dealt with it in a recent number of his *Archivio*, and in this paper one of his most zealous disciples contributes further to its reinstatement.

Zuccarelli has looked for the fossa in a series of twenty-one skulls of criminals, and has found it well marked in four (19.04 per cent.). He has also examined 472 other skulls classed as normal (322), slightly abnormal (101), and very abnormal (49), and finds that the fossa exists in only 0.31 per cent. of the normal as against 2.04 per cent. and 2.97 per cent. respectively in the other groups. Incomplete development of the fossa was noted in the same proportion (0.31 per cent.) of the normal skulls, while in the abnormal it was found in 5.33 per cent. These results are, therefore, in general agreement with the figures given by other Italian anthropologists, of whose statistics the author gives a summary in tabular form. He takes it as established that the vermian fossa is most frequently met with in criminals, that it is not uncommon in the insane, and that it is very rare in the normal. He regards it as a sign of reversion to a pre-human type, and considers that its frequent association with an enlarged middle lobe of the cerebellum is specially significant in view of recent experiments alleged to show that disorders of this part of the brain are connected with peculiar emotional symptoms.

W. C. SULLIVAN.

2. Neurology.

Increase of Cortical Excitability and Epileptic Phenomena produced by Decalcifying Agents [*Aumento dell'eccitabilità corticale e fenomeni di epilessia provocati da reattivi decalcificanti*]. (*Arch. di Psichiat.*, vol. xxiv, fasc. 4, 1903.) Roncoroni.

Sabbatani, in an important series of researches, showed that calcium had a special moderating influence on cellular activity, and that its

presence in the blood was a necessary condition for the coagulation of that fluid. Roncoroni, in the series of experiments recorded in this paper, has confirmed and amplified these results as regards the action of this metal on cortical excitability. The method pursued was as follows:—The motor area in a dog was exposed, and the minimum induction shock that would cause elevation of the corresponding fore-paw was determined; solutions of various reagents were then applied on cotton pads to the cortex, and its excitability was again tested. All the reagents used were salts of sodium; the kation being thus the same in all the experiments, and being in itself indifferent, the effects could clearly be attributed entirely to the action of the various anions with which the sodium was combined, and which had the common property of fixing calcium either by precipitating it or by decreasing its ionisation. This action was uncomplicated in the case of some of the salts (biphosphate and sulphate of soda); in others (chromate and fluoride) the anion had a specific toxic influence; and in others, again (carbonate and pyrophosphate), a possibly disturbing element was introduced by hydrolytic decomposition.

The results, which are given in detail, were clearest in the case of the simpler agents, the phosphate and sulphate of soda; thus a 5 to 7 *per cent.* solution of the phosphate caused a considerable increase of cortical irritability with spontaneous epileptic attacks starting in the affected area, and this irritability could be at once reduced even below the normal by the application of a solution of chloride of calcium.

In the case of the salts whose action was complicated by toxic and hydrolytic factors the results were less clear, but wherever it was possible, by much dilution or otherwise, to diminish or neutralise the disturbing element, the calcium-fixing influence was apparent in increased irritability. Control experiments with acetate and lactate of soda, which have no decalcifying action, and whose anions are not toxic, did not affect the cortical reaction at all.

As far as comparison was possible, it appeared that the effects of the different salts on the cortical irritability varied pretty regularly with their decalcifying and with their anticoagulating actions.

The author concludes, therefore, from his own experiments and from Sabbatani's, that calcium exerts a moderating influence on the cortical cells, so that its diminution is attended by increased irritability, and its excess by phenomena of paralysis. This suggests the view that possibly some forms of epilepsy may be due to a deficiency of calcium ions in the cortex. The author adds that he is engaged in testing this idea therapeutically, and so far with encouraging results.

W. C. SULLIVAN.

3. Physiological Psychology.

The Illusion of Weight in Abnormal Persons [*L'Illusion de Poids chez les Anormaux*]. (*Arch. de Psychol.*, Dec., 1902.) Claparède.

It is well known that normal persons experience an illusion when lifting objects of equal weight but different size, the smaller seeming

heavier. A few years ago Demoor, of Brussels, found that imbecile and weak-minded children are not subject to this illusion, but estimate the weight either correctly or doubtfully, or else experience a reversed delusion, and he concluded that this test might be useful in the diagnosis of slight cases of weak-mindedness. Claparède has continued this inquiry among backward and abnormal children in Geneva. He finds that Demoor's sign (as he proposes to call it) is constant in a certain proportion of cases, but that in other cases it is absent. So far as his experience at present goes, it is never absent in marked cases of mental weakness. He concludes that its value is psycho-pedagogic rather than clinical.

What is the cause of this reversal of the normal illusion? In normal subjects the large box necessarily evokes a more powerful motor discharge, so that even though that box is known to be no lighter than the other it continues to feel lighter. In the abnormal subjects, Claparède believes, although the larger box is believed to be heavier, innervation does not follow in accordance with this belief, so that there is a dissociation of instinct. Demoor was content to say that the abnormal child does not reason, and therefore judges correctly, but that explanation does not account for the reversed illusion. There is evidently more work to be done, and Claparède proposes to follow up the question.

Claparède has also made an inquiry as to how the insane react to this illusion. With the concurrence of Professor Weber, director of the Geneva Asylum at Bel-Air, he examined thirty patients representing the most varied forms of insanity, and found that all but two experienced the normal illusion in the clearest manner. Even some old demented were quite normal in this respect. The two exceptions showed signs of congenital arrest of development, and thus approximated to the class of mental defectives.

HAVELOCK ELLIS.

Psycho-physical Tests of Normal and Abnormal Children. (Psych. Review, July, 1903.) Kelly, R. L.

These tests were made on normal children, between four and fourteen years of age, perhaps somewhat superior to average children, in the elementary school of Chicago University; and on abnormal children (backward and defective but all educable), aged between ten and twenty-two, in the Chicago Physiological School. The tests covered a wide range—senses, muscles, mental and emotional reactions,—and were directed to the ends of (1) obtaining psychological data for pedagogical purposes; (2) attempting to determine simple methods of distinguishing abnormal from normal children; and (3) discovering a way of determining the real mental capacity of children. A few of the results may here be noted.

As regards hearing, three out of fifty-three children in the elementary school were found defective. In vision one was defective; as many as 61 *per cent.* were astigmatic, but only two or three to a degree requiring correction. As many as twenty-seven out of sixty-six showed slight colour-blindness, two to a serious extent; thirteen out of these confused greens and blues, though able to match standard greens and blues.

Much skill and patience were required in testing the abnormal children. Of twelve carefully tested, six showed unmistakable colour-blindness. One girl (not considered educable enough to remain at the school) showed no sign whatever of colour discrimination, but was clever in discriminating the yarns on a form basis. Another could not go beyond red and yellow discrimination. So far as there was any marked preference for colour, it was chiefly for red. Only three of the abnormal children had perfect hearing, as tested by watch; in most cases both ears were affected. The Galton whistle, also, indicated a poor ability in pitch discrimination. The eyesight of the abnormal children was poor, about half being below the standard in keenness of vision, and all but two or three astigmatic. In taste and smell, they were very greatly inferior to the normal children. With the dynamometer fatigue was very rapid and considerable.

It was found that the normal children were much more accurate and rapid with movements of the shoulder-joint than with the finger-joint, so that it would appear to be malpractice to set children to tasks requiring fine finger movements and delicate discrimination. In sorting by colour and by form it was found that children discriminate form more readily than colour, and with abnormal children especially form appreciation seems to come earlier.

Kelly concludes that it is desirable to submit both normal and abnormal children to psycho-physical examinations at frequent intervals, in order to detect defects. He emphasises the importance of individualisation in the treatment of children. Lack of uniformity in psychical reactions is an important sign of neurotic conditions; the lower the intelligence the more prominently fatigue appears. But the abnormal child is only deficient in intensity, and not in extent, of psychic function.

HAVELOCK ELLIS.

Duplicated Hallucinations [Dédoublement des Images visuelles hallucinatoires]. (Soc. de Biol., February, 1902.) Vaschide and Vurpas.

As a contribution to the controversy concerning the central or peripheral origin of hallucinations the authors bring forward the case of a patient of Dr. Briand's, a woman of 38, with former symptoms of hysteria, now replaced by sensorial crises marked by vivid hallucinations. No physical signs traceable except distinct dermatographism and exaggerated reflexes. The senses are all normal, perhaps a little exaggerated in acuity. Hallucinations affect all the senses and are very vivid, but the visual phenomena are most interesting. The patient sees men who stick pins into her body, slash her with knives, and take her away to be burnt. She sees the men in the room where she actually is, and can define their position. She cannot distinguish the hallucinatory figures from real figures. Taking advantage of a moment when the hallucinatory crisis was at its height, the observers interposed a prism between the patient's eyes and the objects she saw, whereupon not only were the real objects doubled but the hallucinatory objects also, becoming single as soon as the prism was removed. Not only was this the case (a result obtained by previous investigators), but the displacement of the hallucinatory image varied with the angle of the prism used

and corresponded exactly with that of real objects. The authors insist on this point as novel, and also on the fact that the subject was insane, not hysterical, and that the hallucinations were not artificially produced.

HAVELOCK ELLIS.

4. Etiology of Insanity.

The Obstetrical Stigmata of Degeneration [Les Stigmates obstétricaux de la dégénérescence]. A critical review of the work of René and Henri Larger. (Arch. de Neurol., No. 89, 1903.) Roy.

Together with mental and physical stigmata one must consider obstetrical stigmata of degeneration, having the same value, the same significance. Such is the opinion which during the last five years R. and H. Larger have endeavoured to propagate by repeated communications based upon a very large number of facts; the thesis of H. Larger, for example, contains more than 600 observations of women, corresponding to at least 2000 obstetrical anomalies. The object of Roy's paper here is to resume briefly and simply the work of these authors, to indicate the different criticisms directed against them, and to show that in spite of objections, most of which on the obstetric side have been formulated by Porak in his recent report to the Academy of Medicine, there remains a category of indisputable facts brought to light in a most original manner. It is a striking fact that the anomalies of gestation should not have hitherto been considered in relation to degeneration. The law established by R. and H. Larger is that "given any anomaly of gestation, one can always and necessarily conclude in the presence of hereditary antecedents, either neuropathic, or psychical, or teratological—antecedents of degeneration, in short,—of either of the generators or of both." Hence anomalies of gestation are degenerative manifestations; and along with the physical and moral stigmata of Magnan they place obstetrical stigmata. The authors demonstrate clearly the absolute identity between these new stigmata and the old ones. By numerous illustrations they show their transformation by heredity, either into one another or into the physical or moral stigmata; so that in certain individuals, or even occasionally in a whole generation, degeneration may manifest itself solely by anomalies of gestation. Moreover it enables us to discover the links which so often seem to be missing in the hereditary chain. Here, for example, are two schemes of observations illustrating this heredity by transformation.

- (a) Transformation of obstetrical stigmata into each other.
 - 1st generation.—Grandmother: abnormal presentations.
 - 2nd generation.—Daughter: abortions, hydramnios, etc.
 - 3rd generation.—Granddaughter: twin births, ectopic gestation, etc., or return to the abnormal presentations of the grandmother.
- (b) Transformation of moral stigmata into obstetrical stigmata.
 - 1st generation.—Mental disorders, epilepsy, etc., but normal gestations.

2nd generation.—No physical or moral defect, but abnormal gestations.

3rd generation.—Mental disorders, epilepsy, etc.

The general table of obstetrical stigmata of degeneration given by H. Larger in his thesis is—

Anomalies of conception: sterility, gemination, ectopic gestation.

Anomalies of pregnancy: placental anomalies, and those of membranes and cord.

Anomalies of labour: abortion, prolonged gestation, abnormal presentations, etc.

Undoubtedly the degenerative nature of *abnormal presentations* is the most original element, and it is the one which has aroused the liveliest criticisms from the obstetricians, who attribute these abnormal presentations to purely maternal and exclusively mechanical causes.

Morel and many others have observed long ago that insane families die out rapidly, but the great merit of Larger is that he shows that sterility, abortion, premature delivery, and stillbirths illustrate the successive steps or episodes in the same process—arrest of development, the result of which, as regards the degenerates, is the destruction of the product of conception, and therefore the extinction of the race. Other anomalies of gestation concur to the same result. *Primâ facie* it appears easy to criticise the inclusion of slight anomalies of gestation under obstetrical stigmata, but, as in the case of physical stigmata, it is a question of degree; there are infinite gradations in hereditary blemishes, ranging from those which are incompatible with life to those that are barely perceptible or only of slight interest.

The authors do not deny the influence of the pelvis and uterus on the foetus, but they look upon the mechanical conditions as secondary causes.

Some of their most striking observations of the influence of degeneration upon the production of abnormal presentations, and other abnormalities of gestation, are those in which women after one or more normal labours develop hysteria or epilepsy, etc., and then have abnormal labours (with abnormal presentations); cured of their nervous disorder, the subsequent labours become normal again. Moreover those of women who have normal presentations with one husband (normal) and abnormal ones with another husband (abnormal)—showing the influence of the male.

The main objection or criticism which can be directed against obstetrical stigmata is that which applies against the other stigmata of degeneration—their frequency; and one might even say that they are often commonplace. Too many subjects have had obsessions, slight or ephemeral, too many subjects exhibit slight morphological modifications of the pinna of the ear, for their simple presence to warrant us in stating that the insanity of these subjects will differ from that of others, free from these blemishes, or that the disease will run a different course. In the same way, abnormal presentations of the occiput are worthy of note in a general way, but practically perhaps of slight import. *Per contra*, marked anomalies, such as face presentations, breech presentations, etc., acquire, precisely on account of their relative infrequency, the same and incontestable value as polydactylia, hypo-

spadias, or the phobias. In future we must therefore inquire for obstetrical stigmata as we do for other stigmata in investigating pathological antecedents. Moreover it follows that it is not a matter of indifference whether one is born like the majority, vertex first, or whether one is born the shoulder, or the face, or the feet presenting.

In presence of an abnormal labour the medical practitioner will do well to apply his efforts by appropriate care and training to preventing the transformation, happily not irresistible, of degenerative obstetrical or physical stigmata into mental stigmata.

Such is the work of H. and R. Larger, which Roy endeavours to popularise by his impartial analysis. H. J. MACEVOY.

A Case of Syphilis contracted in Early General Paralysis [Un caso di sifilide contratta nel periodo iniziale della paralisi progressiva]. (Riv. sper. di Freniatr., vol. xxix, fasc. 1, 2, 1903.) Garbini.

As an addition to the small number of recorded cases of the kind, this observation is of interest. The patient, a man æt. 43, had a bad heredity, and had all his life shown signs of nervous instability. In youth he had had gonorrhœa and soft sores, but nothing to suggest syphilis; some time before his illness he begot a healthy child. There was a history of sexual and, to a less extent, of alcoholic excess. Seven months after the appearance of the prodromal symptoms of general paralysis he contracted a sore pronounced to be syphilitic, and he communicated it to a woman who developed the disease typically. Within about ten weeks of the appearance of the sore he had a papular rash on the chest, and suffered from an apoplectiform attack. The rash spread all over the body, and was associated with general adenopathy. The mental and physical symptoms of general paralysis developed rapidly, and the patient died within ten months of his luetic infection. Mercurial treatment during this time relieved secondary syphilides, but had no effect on the course of the paralysis. The *post-mortem* appearances were of the usual character. W. C. SULLIVAN.

On the Origin and Pathology of some Cases of Melancholia [Zur Kritik und Pathogenese gewisser Angstpsychosen]. (Monats. f. Psychiat. und Neurol., Aug., 1903.) Stransky, Erwin.

After describing a dozen cases of melancholia following heart disease, Dr. Stransky states his view that, as there are some cases of insanity which follow hallucinations, there are also cases of melancholia following diseases of the heart and the great arteries. He distinguishes between these and the complications of heart disease after the insanity has commenced; where the mental affection takes as its starting-point disease of the ear or distress in the region of the heart, one must assume an already existing disposition towards insanity.

WILLIAM W. IRELAND.

5. Clinical Neurology and Psychiatry.

Growth of Hair in Lumbo-sacral Region and Spina Bifida Occulta
[*Tricosi lombo sacrale e spina bifida occulta*]. (*Riv. di patol. nerv. e ment.*, Sept., 1903.) Garbini, G.

Garbini describes at length a case of *Spina bifida occulta* with development of hair in lumbo-sacral region covering and reaching below the malformation of the spine.

The subject was an epileptic lad æt. 23. There was a strongly marked history of alcoholic heredity from both parents, and of phthisis on the paternal side; two of the patient's uncles died of pulmonary tuberculosis. His mother was weakly and of a neuropathic tendency. She had been pregnant ten times, had four abortions, and one child born dead at full term. The patient was the eldest, and the labour was a difficult one, lasting four days. At birth his mother stated there was a red mark like a stain in the lumbo-sacral region, covered with down which, as the child grew, became a tuft of long and coarse hairs. He had rickets and nocturnal enuresis, and was of a very weakly constitution. He developed epileptic fits at the age of twenty-one, following on a shock caused by being present at the violent death of a comrade. The fits, which lasted about four months, averaged 4 *per diem*. At times now he is subject to short periods of mental confusion. There was no hydrocephalus, nor atrophy in limbs or trunk. The plantar reflexes were normal, the knee-jerks and cremasteric reflexes were sluggish, especially on the right side. Sensation was excellent all over body, except in a small circumscribed spot in the sole of left foot at the tarso-metatarsal joint of the second toe, where there was a zone of complete anæsthesia to painful impressions about the size of a centime piece. The patient's gait was swaying and unsteady; he could not balance himself on one foot. Romberg's sign was absent.

Turning to the lumbo-sacral region, a tuft of hair of large size was noticeable, arising from between the third and fourth lumbar vertebræ. The hairs were abnormally long (7 to 12 cm.), directed downwards and converging towards the median line. This tuft covered two irregular areas of skin entirely devoid of hair, slightly larger than a centime piece. These areas of a white colour had the appearance of cicatrices, and were situate at the level of the fifth lumbar vertebra between the vertebral and paravertebral lines. The surrounding skin, for a distance of more than a crown piece, was of a red colour and covered with numerous tiny vessels. It was not raised above the ordinary surface level, nor did the colour disappear on digital pressure. On separating the tuft of hair one saw more clearly the fissure in the vertebral column, 10 cm. in length, 4 cm. in breadth at the widest part, and 1½ cm. deep. The spinous process of the fifth lumbar vertebra was absent, and in its place a smooth surface of non-osseous tissue. At the sides of the cleft in the vertebral column, at the level of the fifth lumbar and first sacral vertebræ, could be felt two small masses, covered with skin, of a soft elastic nature, lobulated, fixed to the underlying tissues, and of the nature of lipomatous tumour. There was no painful reaction to digital pressure. At irregular intervals, sometimes one to two years, this tuft of hair used to fall off, and grew again in from three to twelve months.

The author then quotes several cases already published of failure of union of the lumbo-sacral vertebral arches with corresponding fissures into the spinal canal, and presence of a tuft of hair in the lumbar region. Virchow was the first to use the term "occulta" to cases of this kind, in which the characteristic spina bifida tumour was absent, with few symptoms of disturbance usually appertaining to this lesion. He gives a short *résumé* of forty-four cases of spina bifida occulta, in thirty of which a greater or lesser development of hair in the lumbo-

sacral region or corresponding region was observed. In only one case was its absence directly noted. In the others, in four the observations were made on dried specimens, and in the remaining the cases were either fetuses born dead or newly born infants, which either were not seen after the first week of extra-uterine life or died shortly, so that its absence might well be put down to their tender age. He strongly combats the idea of Ornstein that the tuft of hair was of the nature of a caudal appendage, and holds with Virchow and Recklinghausen that it is simply a concomitant sign of spina bifida occulta. He is strengthened in his opinion by the frequency of its presence in cases of spina bifida occulta so as almost to be a sign of this lesion, by the situation of this tuft altering with the different positions of spina bifida in the vertebral column, and by the frequency of growth of hair with other cases of altered or arrested development. He thinks that it is a sign of altered development caused by disturbance in the embryonic formation. The cause of its association with spina bifida occulta is not yet settled. Virchow advances the theory that it is of the nature of an inflammatory process. Recklinghausen thinks that it is due to a hyperplasia. Both theories have something in their favour.

As before mentioned, on either side of the vertebral cleft two little tumours were found of a lipomatous nature. Brunner and Recklinghausen have also met with tumours of a similar nature. Muscatello and Brunner believe that there is a fixed relationship between the appearance of the skin over the vertebral fissure and the parts constituting the spina bifida occulta. The former holds that in all probability the cicatricial appearance of the overlying skin indicates the presence of tissues of foreign formation in the vertebral canal below. It is worthy of note that in Jones's and Virchow's cases, where the skin overlying looked of normal appearance, the fissure was covered over by a membrane, and no tumour or neoplastic tissue was found. In Brunner's and Corrado's cases a small area of complete anæsthesia of left foot of the size of a centime piece was found, as in the present case. It would not be surprising if such an anæsthetic zone would lead to a perforating ulcer, as in several cases recorded.

A. J. EADES.

Pseudo-hallucinations [*Psychical Hallucination of Baillarger*]. *A Contribution to the Psychology of "Demenza Paranoïde."* (*Riv. di patol. nerv. e ment.*, vol. vii, fasc. 1, 1903.) *Lugaro, E.*

Lugaro enters very fully into the literature of pseudo- or psychical hallucinations, and gives notes on eight cases markedly illustrating this form of mental disorder. From these he draws the following conclusions :

Special characters of pseudo-hallucinations.—In certain cases, states of consciousness are present which consist in mental images free from any sensory character. They consist generally of images of heard words (internal voices transmitted by mysterious agency), but may assume the shape of simple (apart from verbal) images, of ideas, thoughts, or direct suggestions. Very characteristic is the antagonism of these mental images to the remainder of the consciousness, which

causes them to be held as extraneous to the patient's personality, as the thoughts and will of some one else. They are always recognised by the patient as morbid, and, even when associated with true hallucinations, are distinguished from these by their subjective character. Neologisms are often used to express these images. It is necessary to trace the relationship between pseudo-hallucinations and the so-called epigastric voice, psycho-motor verbal hallucinations, reduplication of personality, the thought expressed aloud (*Gedankenlauterwerden*), compelled ideas, verbal impulses, and compelled actions of every kind.

Pseudo-hallucinations and auditory hallucinations.—The characteristic feature of true hallucinations is their objectivity. They (auditory hallucinations) are as real to the patient as the voice of the doctor who may interrogate him, and are recognised as distinctly objective. The pseudo-hallucination is quite different. Patients will say they hear the voice of So-and-so, but only in a metaphorical way, and not through their ears. That they are *mental*, and can suggest certain acts.

Pseudo-hallucinations and epigastric voices.—As a rule the epigastric voice is the result of pseudo-hallucinations of heard words associated with hallucinatory sensations in the abdominal or thoracic viscera, where the patient localises it. This is not the universal view. Some authors hold that it depends on psycho-motor verbal hallucinations, others that the visceral hallucination is always associated with true objective auditory hallucinations. The author's view is that the epigastric voice is mental, aphonic, determined by pseudo-hallucinations accompanied by abnormal sensations in the viscera involved. The phonetic apparatus may be the seat of hallucinatory sensations, but this is not necessary for the phenomenon of the epigastric voice.

Pseudo-hallucinations and psycho-motor verbal hallucinations.—If an abnormal sensation conjointly with a pseudo-auditory hallucination can locate the internal voice in the viscera, thoracic or abdominal, why should not analogous sensations in the apparatus of phonation cause the idea of a voice of an extraneous personality which has the power of compelling the patient to pronounce words independently of his will? It would be strange if, considering that hallucinations may arise in any part of the sensory field, the muscle sense of the phonetic apparatus were alone exempt. A pure psycho-motor verbal hallucination should only give the patient the illusion of speaking without hearing his voice, because the stimulation of the psycho-motor centre of speech from an endogenous cause should necessarily be projected into the organs of phonation and nowhere else. There is no emission of sound. Motor-verbal impulses should not be confused with psycho-motor verbal hallucinations.

Pseudo-hallucinations and substituted personality.—In cases of pseudo-hallucinations there is frequently a delusional idea of possession, and consequently a feeling of a substituted or reduplicated personality. As the hallucinations assume the shape of language formulated by another, or of strange ideas abnormal to the patient's own train of thought, he believes that another personality speaks inside and directs his thoughts and will.

Pseudo-hallucinations, psychomotor hallucinations, and "the thought expressed aloud" (*Gedankenlauterwerden*).—Cramer and others held that psychomotor verbal hallucinations explained "the thought expressed aloud," since, they said, the subject of an hallucination in the motor speech centre does not attribute to his own personality the words formed by his tongue, and finishes by objectiving them, and by believing them to be an external repetition of his own thoughts. How an hallucination of a muscle sense can explain an auditory hallucination one cannot conceive. Numerous clinical facts go to show that here the auditory centre is involved, and that this is a true hallucination of hearing which follows and repeats the thoughts formed internally. One of the author's eight cases quoted was a most intelligent man who said that the voice which whispered his thoughts to him was quite close and was in the shape of a little devil, and clearly distinguished this objective voice from the *mental* voice which he also felt speak within. Tanzi's theory of the origin of hallucinations helps better to explain how the true echo of the thought may be formed.

Pseudo-hallucinations and compelled ideas.—There is not so close a line between pseudo-hallucinations and the so-called compelled ideas as one might imagine from the extraneous and antagonistic character of the former to the rest of the patient's personality. The compelled ideas are linked to the ordinary train of thought, and come by the normal associative paths. Their morbidity consists in the affective state of mind that accompanies and originates them. They are apprehended, and are fostered by repetition.

Pseudo-hallucinations, impulses, and compelled actions.—Compelled acts are often associated with compelled ideas and with the impulses so commonly met with in pseudo-hallucinations. These impulses are either a direct consequence of mental verbal suggestions, or else arise spontaneously and in a manner extraneous to the patient's personality, and he is only a passive factor in their execution. They are unforeseen, and as a rule of a frivolous nature. Compelled acts depending on enforced ideas are, on the other hand, foreseen and feared, always of a malevolent character, and at times instil horror in the patient's mind (ideas of suicide and homicide). There is a constant struggle between them and the volition.

As regards the *frequency* of pseudo-hallucinations, Baillarger states that they are present in the great proportion of chronic insane, as are true hallucinations in the acute form. Lugaro has made no accurate statistics, but thinks that in the chronic forms of insanity, with complex and varied delusions of persecution, hallucinations are rarer than is believed. Pseudo-hallucinations, it is true, predominate over the true. He strongly combats the view that the psychical are only a developing phase of the true form, and holds it far more probable that patients who have had at the commencement true hallucinations in great numbers, when the illness assumes a quieter, more chronic form, have hallucinations of a purely psychical nature.

Pathogenesis.—Lugaro says that pseudo-hallucinations are the result of an abnormal stimulation or irritation of the associative centres, and to support this premises the following conditions as present:—A hyper-sensitive condition of certain determinate systems and cortical regions,

a state of "elective irritability" of the same, and the action of a pathological stimulus travelling by paths other than the ordinary associative ones to the association centres, and thence by the ordinary association paths to the other centres in the brain. He says that the transformation and refining of a direct stimulus of "extra-associative" origin, and its admission into the state of consciousness, is easy of verification in the case of the association, but not of the sensory, centres. In "demenza paranoide," like stimuli of "extra-associative" origin, and a state of irritability of a certain system of cortical neurons, can be verified. In cases of katatonia, and also of general paralysis, which presents many of the symptoms of dementia præcox (*viz.*, motor impulses, muticism, negativism, pseudo-hallucinations), and also in climacteric melancholia, he has found marked alteration or destruction of the lowest layer of cortical cells, the polymorphous layer, with accumulation of neuroglia. By exclusion can be attributed to this layer of cells those functions which are injured in dementia præcox.

Finally, he makes a summary of his conclusions. Most of these have been noted before. He holds that pseudo-hallucinations, forced actions, and hallucinations in part, as well as the thought expressed aloud, compelled speech with suggestion, and epigastric voices, probably all depend on an internal cerebral irritation which acts independently of the ordinary mechanism of association. That true hallucinations have their seat in the sensory, pseudo-hallucinations in the association, centres. To explain the origin of complicated true hallucinations the centres of association must also enter into play. Pseudo-hallucinations, while frequent in the paranoid and præcox forms of dementia, are also met with in climacteric and senile insanity, and at times in general paralysis. The characteristic mental disturbance in dementia præcox, which is manifested in a pure and isolated form in certain cases of paranoid dementia, consists in the disturbance of the elaboration of the motives of action, of the will and conduct. The affective insensibility, the motiveless emotions, impulses, katatonia, etc., are dependent on this disturbance, and pseudo-hallucinations are probably its immediate associative effect. It is probable that this disturbance depends on an elective and systematised lesion of special cortical neurons. This system engaged cannot be either sensory or motor, because sensation and motion are unimpaired; nor can it be that destined for the association of images, for memory and ideation are intact. The lesion, then, must involve a system of neurons which holds the supreme co-ordinating power between representations, the corresponding emotions, and the execution of the acts. From the data to hand Lugaro is inclined to the idea that the system injured is contained in the deep layer of the cortex, the stratum of polymorphous cells.

A. J. EADES.

A Contribution to the Doctrine of Paranoia [Ein Beitrag zur Lehre von der Paranoia]. (Allgem. Zeits. f. Psychiat., Bd. lx, S. 65.) Schneider, H.

An old-standing case of paranoia is described at great length. It is the case which forms the subject of Kraepelin's fifteenth lecture (see that author's *Einführung in die psychiatrische Klinik*, 1901,

page 147), where it is described as a type of paranoia. Schneider subsequently studied the case at Emmendingen Asylum, and this paper details the results. The history and symptoms are described in very full detail, and then follow considerations as to the nature and origin of paranoia. The author, who keeps closely to the classificatory views of Kraepelin, dwells upon a certain clouding of judgment (*Urtheilstrübung*) as being a necessary antecedent to the formation of paranoia. The writer of this notice has insisted upon the weakening of judgment which is involved in the acceptance of delusion in his article on delusional insanity in Clifford Allbutt's *System of Medicine*. The recognition of this failure of judgment, the highest quality of the mind, in paranoia is, in fact, the reason why all modern authors reject the notion of monomania. Schneider questions how this impairment of judgment comes about. One origin is increased action of the affective side of the mind, an unstable emotional state occurring in persons of degenerative predisposition, in psychopaths. That this is merely placing the elephant on the tortoise Schneider seems to see, for he tells us that where we say the judgment is obscured because the emotional state is heightened, we introduce a causal nexus where we are only entitled to speak of co-ordination. He points out that the delusion of jealousy of the alcoholic is a true paranoia. As the passion of jealousy cannot be said to cause the delusion, or *vice versâ*, inasmuch as they are both dependent on a common cause, the poisonous effect of alcohol upon the nerve-cells, so in other forms of paranoia a deeper and truer cause underlies in common the emotional and the delusive states. However, it is important to distinguish this condition arising in psychopaths, which is curable, from the second form of the disease, which arises from weak-mindedness, the product of a more acute affection that has run its course, leaving a certain defect. This primary trouble is most often precocious dementia. The second form of paranoia thus brought about is, of course, incurable. On the whole, Schneider seems to be of opinion that we should relinquish paranoia altogether as a primary condition, placing some of its varieties among the psychopathic degenerative states, and others among the sequelæ of precocious dementia, just as alcoholic delusional insanity has long found its proper place under the head of alcohol, and not under the head of paranoia. [Of course, the justice of this judgment depends upon whether the psychopathic degenerative states on the one hand, and precocious dementia on the other, are distinct diseases, as alcoholism is.]

CONOLLY NORMAN.

Stirner's Ideas in a System of Paranoiac Delusion [*Stirner'sche Ideen in einem paranoischen Wahnsystem*]. (*Arch. f. Psychiat., Band xxxvi, S. 793.*) *Schultze, E.*

The author of this paper tells us that the metaphysician, Max Stirner, who flourished in the beginning of the last century, has become popular within the last few years because Reclam has brought him out in a cheap edition, because he suits the Nietzsche fashion of to-day, and because he likewise tones in with anarchism, a cult which has a certain following. The best of these reasons is no doubt the first, yet it might

stagger humanity to think what would happen if Reclam began to publish in twopenny volumes the writings of all the minor German metaphysicians, of the mediæval schoolmen, or of the English divines of the seventeenth and eighteenth centuries. Dr. Schultze has mercifully summarised his very long extracts from Max Stirner, thus:—"Stirner teaches egoism in its extremest form. He is the representative of the utmost individualism. What Stirner can do, that he may do; for him the place of the conception of 'right' is occupied by that of 'might,' and he recognises only rights, no duties. Political laws, ecclesiastical ordinances, moral rules, are for him mere idle phantasms, mere imagination; no authority binds him. What he wishes to-day he can recall to-morrow if it suits him and seems advantageous. He may encroach upon the rights of others as far and as much as he has the power, and their acts are correct to him as long as they do not interfere with his interests."

Schultze gives a very full history of a female patient who came under his care too late in the case to enable him, indeed, to study the genesis and growth of her delusions, but who presented exquisitely the ideas which Stirner has formulated. Patient's father was epileptic, her mother weak-minded. Patient learned well, but was always odd. Fire-lifting, domestic quarrels, and attempts at suicide preceded the appearance of overt insanity. In her confirmed condition she was a self-contained, retiring, and somewhat depressive person, yet entertained ideas thus expressed:—"If I lie or steal or murder or commit adultery, or strip myself partially or entirely naked, I am yet not consequently a liar, a thief, a murderer, an adulteress, and a vulgar and improper person, but I remain honourable and proper. If, on the other hand, I am compelled to act thus by others and against my will, it is entirely wrong," etc. Her standpoint is briefly set out by Schultze in three propositions: (1) what I will is right; (2) I only do what I will, therefore commit no wrong; (3) what I do against my will, compelled by others, or by necessity or fear, is wrong. Essentially the patient's doctrine is Stirner's with this difference, that Stirner applied the egoism of the logician to all the race, whose state would therefore be that of perpetual and lawless struggle; the patient applied the egoism of the lunatic only to herself—she would be supreme, and all the world her slaves. For Stirner there is neither right nor wrong in the abstract; for the patient right is what she wills, wrong what anybody else wills. She maintains this position with perfect consistency of speech, and with the calm close reasoning of the paranoiac.

Schultze discusses the possibility of his patient having been directly influenced by Stirner—that is, by reading his books or hearing of his views,—but any influence of this kind appears in the highest degree improbable. He also considers the question of whether Stirner himself was not insane, but concludes that there is not sufficient evidence to form a judgment.

Does not Schultze's patient show a variety of insanity of negation? That this latter condition may be associated with extreme self-esteem is shown in cases of general paralysis; that it may be partial is also well known; it would be interesting if we found it only in the moral field.

CONOLLY NORMAN.

Paranoia among Brazilian Negroes [La Paranoia chez les Nègres].
(*Arch. d'Anth. Crim., Sept. and Nov., 1903.*) *Nina-Rodrigues.*

Dr. Nina-Rodrigues, the professor of legal medicine at Bahia, and one of the best known of Brazilian alienists, brings forward in these papers a full and detailed study of the various forms of paranoia as exhibited in Brazilian negroes, illustrating his cases with photographs. The fundamental manifestations are, he finds, the same in blacks and in whites, but certain differences may be noted. There is thus a special prevalence of motor and psychomotor hallucinations, and the author associates this with the normal prevalence of the verbal motor type in negroes, as shown by the frequency with which both in Africa and America they talk aloud to themselves. The contents of the delusion may be complex, but the mental level of the negro is normally so much lower than that of the white that a thoroughly well systematised and chronic delusion, such as is fairly common among whites, is extremely rare in the opinion of all Brazilian alienists, and when found, the author asserts, always indicates either that the subject belongs to one of the higher African races or else that he has a trace of white blood. The subject of the delusion is nearly always connected with sorcery, and the author thinks it necessary to explain that this is not due to atavism, but that an underlying belief in sorcery is still common to most negroes, though it is covered by a thin veneer of civilisation.

HAVELOCK ELLIS.

On Hallucinatory Insanity following Affections of the Ear [Ueber hawzinatorisches Irresein bei Affektionen des Gehörorgans]. (*Monats. f. Psychiat. u. Neurol., Sept., 1903.*) *Bechterew.*

Dr. Bechterew has made an extensive survey of the literature bearing on the subject, as well as a careful clinical study of patients in whom affections of one or other of the senses appear to have been the starting-point of insanity. This is especially the case with diseases of the ear. Subjective sounds pass into definite illusions ending in insanity with hallucinations and delusions. In these cases, it is assumed that there was a predisposition to mental derangement. In the beginning the patient interprets the sounds into voices, which are generally unpleasant. They reproach, insult, or threaten him. He is terrified or excited. Then begins a struggle between the sane understanding and the suggestive illusions. Sometimes one or more of the senses are involved; sometimes the sounds or voices are confined to one ear. If the voices or spectra overpower his reasoning faculties, he begins to answer the appearances or act as if they were real. Then there will be times in which he doubts the reality of these illusions. If his mental powers are unstable, he ends by assuming that they come from something without, acts upon this belief, and allows his fancy to construct a whole set of hallucinations and delusions. Insanity of this kind is sometimes obstinate. The intensity and renewal of the delusions is favoured by each exacerbation of the disease of the sensory organ affected. Indulgence in drink may increase the liveliness of the sensory illusions.

The patient's recovery is often dependent upon the cessation of the original irritation. Enduring insanity may be due to a chronic affection of the middle ear, which might escape attention if inquiry were not directed towards the state of that organ.

Dr. Bechterew describes at length four most interesting cases of auditory illusions. The first of these was a Russian officer forty years old. He had been married for fifteen years to a lady who had children by a previous husband. In the year 1902, having a settled abode in Minsk, the children came to the house, where they all lived pleasantly. Owing to hard work during spring and summer, he became, in the autumn, nervous and sleepless. One night, after lying long awake, he heard sounds which he at first thought came from an alarm watch, but the sounds soon began to pass into words. Two days after he heard words and sentences. This amused him, when a voice came, "Why do you laugh?" While he was wondering at this, the answer came that it was his step-daughter who spoke. Then he put questions in his own mind, to which it seemed to him that he got answers quite in keeping. If the voices in these responses used technical words, they were mispronounced, as a girl might be expected to do. These voices ceased when his step-daughter was out of the house. He asked the voices not to tease him, when he got flippant answers. After four days he asked his wife if she heard anything, when she said she neither heard voice nor sound. This frightened him. The voices continued to torment him, abusing him, and saying that his step-son and step-daughter hated him and would ruin him. He then consulted a physician, who assured him that these were but hallucinations of hearing. He spoke about them to his step-son and step-daughter, who were surprised, and assured him that they had nothing to do with the voices. He got his wife to send the children away to a friend's house, when the voices ceased for a while, but soon returned, and he felt as if he had received a blow on his left shoulder. Sometimes he had the sensation of eating; he felt his jaw move and his teeth press upon something, and then the feeling of swallowing. Upon looking in the mirror there was no motion seen in his face, but a voice informed him that he was eating an apple. On going to St. Petersburg, the voices and other illusions ceased, and he felt quite well. The officer quite believed that these were sheer hallucinations. On being examined, it was found that he had chronic catarrh of the air-passages and pharyngitis. He had no subjective noises in the ear.

The second patient, a sister of charity, forty-two years old, had been mercilessly hard-worked in the convent. She has suffered much from inflammation of the ears, and is quite deaf of one of them. She had been long tormented with voices crying shameful things to her. At night voices seemed to come from under the pillow. She complained of them to the abbess, who told her at first that it was owing to the devil, but afterwards got her sent to an asylum, from which she was discharged in a month. It does not appear she was ever insane. She does not regard the voices as real, though inclined to think the abbess has something to do with getting the voices communicated to her through a phonograph. The hallucinations of hearing so torment her that she says she will hang herself if there be no improvement. She is easily

hypnotised, and subject to post-hypnotic suggestions. It was found impossible to make an end of the voices by this method.

No. 3 was a young woman who was much tormented by voices and noises in the ears. She had no affection in the other senses, and was quite sane. Examination showed chronic inflammation of the middle ear.

No. 4, though not the least interesting, is given in too great detail to be here condensed. The subject was a Caucasian Mahomedan, an officer in the Russian service. He suffered from otitis media, with displacement of the bones of the ear. Besides sounds, voices, and music, which persistently tormented him, he had several hallucinations of sight and smell. He regarded these affections in a critical spirit, had no delusions, and in his regiment was regarded as a sensible and intelligent man.

WILLIAM W. IRELAND.

1. *The History of Katatonia* [*Ueber die Geschichte der Katatonie*]. (Cbl. f. Nervenheilk. u. Psychiat., xxv, Nr. 145, S. 81.) Arndt, E.
2. *A Contribution to the Clinical Study of Katatonia* [*Zur Kasuistik der Katatonie*]. (Monats. f. Psychiat. u. Neurol., Bd. xii, Heft 1, S. 22.) Kahlbaum, K.
3. *The Psychology of the Symptoms of Katatonia* [*Zur Psychologie der katatonischen Symptome*]. (Cbl. f. Nervenheilk. u. Psychiat., xxv, Nr. 150, S. 433.) Vogt, R.

When Kahlbaum published his monograph on katatonia he merely, so far as regards symptomatology, brought together the results of previous workers. This innovation was to give prominence to the principle that *natural* forms of disease should be established by taking into account their pathogeny, entire symptoms, course, and result, and not merely some special symptom or groups of symptoms. Even the principle, however, was not new. Pinel, in his account of mania, described a prodromal period and stages of onset, acme, and decrudescence; while Esquirol expressly stated that "mental diseases, like bodily, have a definite course, with prodromata, onset, acme, and termination." On this principle Bayle and Calmeil described general paralysis, Baillarger *folie à double forme*, and Falret *folie circulaire*. Guislain tried to establish certain elementary forms of mental affection, from which morbid entities were to be built up (and among them described, under the term ecstasy, a state of suspended intellect with muscular spasm). He thought that all mental disease began with melancholia, and that the feelings were first affected, then impulse and passion, and finally thought. Zeller, followed by Griesinger, and especially Neumann, promulgated the doctrine that there is but one natural mental disease, of which the forms of mental disorder are only stages, the earlier being curable, the later not. This is a recognition of the uselessness of previous classifications, and Kahlbaum, in his own classification (1863), tried to show that it was really the method which was at fault, and asserted the great principle above mentioned, *viz.*, that to establish a natural form of disease every factor must be taken into consideration.

As regards the symptoms, the most important group, melancholia attonita, was long considered a variety of ordinary melancholia, of

which Baillarger held it to be merely the most advanced form; and Kieser held that it was simply due to the reflex on the will of morbidly increased feeling. Pinel, however, classed it with idiocy, and Esquirol called it *démence aiguë*. Kahlbaum, on the other hand, denied it any connection with ordinary melancholia, and said that the rigidity of the condition was not of psychic but of motor origin. A tendency to pass into excitement was observed by various authors. Of the other motor symptoms, Guislain described mutism, declamation, mannerism of speech, repetition of phrases, grimacing, impulse, and fantastic actions. He pointed out the unfavourable significance of stereotypy and mannerism, and held the symptoms to be of automatic motor origin. Verbigeration, stereotypy, and mannerism were described by Esquirol and others. R. Arndt described various motor phenomena also, and tried to group the symptoms into a single disease, but placed the condition under the head of chorea, thinking that muscular restlessness, not spasm, was the characteristic feature.

On the basis of these and other observations Kahlbaum built his concept of katatonia. It arose naturally out of his new classification of insanity, published in 1863, which he worked out on the general principle before alluded to; and especially from one form of disease described therein, *viz.*, *vesania typica*. This, when complete, contains four stages, *viz.*, melancholia, mania, "perturbation," and dementia, corresponding respectively to those of increment, acme, decline, and defect; and the stage of perturbation is equivalent to melancholia attonita, which is therefore not a form of disease, but a morbid state. In 1866 he described katatonia in all but name, laying stress on the importance of the combination of mental and motor disorder, under which latter he included not only spasm and catalepsia cerea (between which he held that there was no essential difference), but also others, and especially stereotypy and the mimetic and facial phenomena. The name was given in a communication made in 1869, though it was not until 1874 that the formal description of the disease was published. He defined it as a brain disease running a cyclic course, of which the mental stages are successively melancholia, mania, stupor, confusion, and dementia, but one or more may be absent. In addition, certain motor phenomena with the general character of spasm are essential. It occurs mostly in early middle life, shows slight heredity, and is predisposed to by masturbation, chlorosis, and mental strain. Remissions are rare, but prognosis is favourable. The chief motor symptoms are spasm, catalepsy, mannerism, stereotypy, and negativism, and mutism and verbigeration are especially important. The cases are divided into katatonia mitis, gravis, and protranata. The anatomical basis was held to be a degenerative process, ending in atrophy, but no microscopic evidence was forthcoming. It will be seen that the present conception of katatonia differs very markedly from this original description.

In tracing the history, the influence of another concept, hebephrenia, soon becomes felt. Cases of hebephrenia had long before been described by Esquirol under the name of "acquired idiocy," and by Morel under that of "precocious dementia" (the first occurrence of this term), as well as by others, including Kahlbaum (1863), who laid special stress

upon puberty as an etiological factor. Hecker, however, gave the first thorough description of it under the above name in 1871. He defined it as a disease occurring at puberty (from eighteen to twenty-two years of age), characterised by successive or variable stages of melancholia, mania, and confusion, and rapidly issuing in dementia of a peculiar form (which resembles in permanence the ordinary mental characters of puberty). Heredity he regarded as an unimportant factor, and the hallucinations and delusions as possessing no special significance. Fink, however, insisted on the great importance of degeneracy, whether hereditary or acquired, and relegated puberty to a subordinate position, a contention supported by later writers. He also laid special stress on the termination in dementia, considering the scheme of the course (which was intermittent or remittent) unimportant. The dementia varied in degree, and some cases showed motor symptoms like those of katatonia. Schüle even defined the latter as a hebephrenia with associated spastic neurosis. He distinguished a congenital degenerative acute dementia of puberty, distinct from hebephrenia, to which he gave the name *dementia præcox*, and with Neisser and Rienecker thought that there was some confusion between the former and Sander's "original paranoia." Pick, however, considered hebephrenia to be a variety of *dementia præcox*, which is a progressive mental weakness commencing at puberty. The concept gained most acceptance in Russia, where several writers handled it; and the consensus of more recent opinion has been to lay increased stress on heredity, less on the time of life (which Daraszkievicz has advanced to thirty years), and most of all on the terminal dementia. Two distinctions between hebephrenia and katatonia—the time of life and the comparatively slight degree of dementia in the former—having been swept away, the two concepts have finally been grouped together with a third, *dementia paranoides*, by Kraepelin, under the name "psychical degenerative processes," the three forms being connected by transitions, and possessing the common feature of termination in psychical weakness. He regarded the bad prognosis and the frequency of hereditary degeneracy as the most important characters in hebephrenia, and advanced the limit of age to early adult life.

Unlike hebephrenia, an attempt was made to restrict the boundaries of katatonia by separating from it a number of cases under the name "primary derangement," the characteristic feature of which is, according to Westphal (1876), a primary disorder of ideation without implication of the emotions. The concept accordingly rests upon a prominent psychical symptom, disregarding somatic and etiological relations, and therefore it and katatonia are mutually exclusive.

The subsequent history of katatonia has been one of gradually increasing acceptance of the concept, so far as Germany is concerned. Hecker early gave in his adherence, and although Brosius (1877) only partially adopted the theory and doubted the existence of the disease as an anatomical entity, Jenser (1881) and Neisser (1886) soon accepted it.

The first text-book to describe katatonia was that of Schüle in 1880, but he made it a variety of "derangement," not a separate entity, grouping together melancholia attonita, primary dementia, and "katatonic

derangement" (under which last he included forms of very different character) as "cerebro-psychoses with tension-neurosis." The classification is essentially symptomatic. Later, in 1886, Schüle put down katatonia as a peculiar form of acute hallucinatory insanity (*Wahnsinn*) with motor symptoms, explaining the latter as the result of delusion. In 1897, however, though still refusing to hold katatonia a natural morbid entity, he discarded the psychical system of classification, and adopted one based on general pathology, classing katatonia as akin to hysterical insanity in the slighter form, while the severer is a primary dementia, or a form of periodic psychosis. In 1901 he restricted the term entirely to cases of primary dementia, and considered the essential character to be the whole phenomena of the degenerative process.

The Vienna school strongly opposed the idea of katatonia, owing largely to the attention which they gave to "acute derangement." Thus Krafft-Ebing to the last classed it under the circular psychoses. It is, however, really identical with the form of Meynert's "amentia" called by him "compound amentia," which, beginning as hallucinatory confusion, may end in stupor with verbigeration, stereotypy, mannerism, catalepsy, mutism, etc.

L. Koch (1889) made katatonia an organic psychosis, whereas Sommer (1894) placed it amongst the anatomically unrecognisable diseases. Ziehen in the same year considered it a rare disease, and placed it amongst the "composite psychoses." As he seeks to work out psychiatry on the basis of association psychology, his method is opposed to that of Kahlbaum. All authorities in Germany do not accept the disease; e.g., Wernicke considers it a mere congeries of symptoms. On the other hand, Kraepelin, who in 1889 classed katatonia as a form of "Wahnsinn" (hallucinatory confusion), had in 1893 adopted the clinical standpoint and accepted it as a natural morbid entity arising on a basis of congenital or acquired degeneracy, and ending in dementia. He was also the first to point out its close kinship to hebephrenia, the essential character in both being the tendency to dementia. Finally, in 1898, he grouped katatonia, hebephrenia, and "dementia paranoides" together as dementia præcox. He considers primary derangement, whether acute or chronic, as akin to katatonia, if not to be included under it, and believes that it comprehends all cases of melancholia attonita.

As regards the genesis of the motor phenomena, two main theories have been advanced: (1) that they are due to delusion and hallucination; and (2) that they are of automatic motor origin, being caused, for example, in the case of *flexibilitas cerea*, by equal innervation of antagonistic muscles, in that of spasm by unequal innervation (Rieger, Roller, and Neisser). Neisser thought mutism due to a high central obstruction, which in verbigeration is broken through by pathological irritation. Cramer ascribed some of the symptoms to muscular hallucination, the sense of a movement being conveyed to the brain, and then followed by the actual movement. Kraepelin is of opinion that the common element underlying motor anomalies is a morbid disorder of will activity.

The concept has not gained so full acceptance in other countries, with the exception of Russia and America. In France Séglas and

Chaslin declared against it, but they took Kahlbaum's original scheme for their starting-point. In England it has not met with much recognition, but has been accepted by Nolan.

Referring to the pathology, it may be noted that Sommer (in opposition to Kahlbaum) found no atrophy of the cortex, but thought that katatonia might arise from various brain diseases—paralysis, tubercular meningitis, and cortical gliosis. Alzheimer found numerous karyokinetic figures and signs of growth in the glia of two cases, along with peculiar ganglion-cell changes.

K. Kahlbaum, by the study of twenty-seven cases from the Frankfurt Asylum, seeks to answer two questions, *viz.* :

1. Is katatonia an independent disease, capable of sharp demarcation? and

2. Is the prognosis unfavourable when marked katatonic symptoms are present?

In this study he brings out a number of interesting points. Fifty *per cent.* of his cases showed hereditary degeneracy (alcoholism in the father in 20 *per cent.*), but there was no essential difference in the disease as it occurred in the cases with and without heredity. The age of onset varied from seventeen to fifty-five, but over 80 *per cent.* were under thirty. Advanced life does not exclude the hope of full recovery. Sixty-five *per cent.* of his cases were women, 35 *per cent.* men. In contrast to the results of other observers, the number of manual labourers was found to preponderate over that of members of the cultured classes. He is inclined to consider onanism either as a symptom of the disease or merely as an indication of degeneracy. In nearly one third of the female cases the disease began after confinement or abortion. In two cases it followed influenza, and both recovered. In about 40 *per cent.* of the cases the acute onset occurred within the first eight days, and in half of these within the first two or three. A distinct feeling of impending illness preceded in some cases; in others a melancholic stage, lasting several days. In the rapid cases the disease soon reached an acme, taking the form either of acute confusion with violent excitement, or of katatonic rigidity with negativism and stereotypy. On the other hand, 40 *per cent.* of the cases showed a prodromal stage of four to six weeks, and in these cases a paranoiac tone prevailed, which had no prognostic significance. This tone prevailed still more in the remaining 20 *per cent.*, which took months to develop the disease fully. In 50 *per cent.* the prodromal stage passed rapidly into stupor; in 40 *per cent.* stupor alternated with excitement, or a long stage of excitement was followed by stupor; while in 10 *per cent.* no stupor of long duration was present, but the katatonic symptoms appeared during the excitement. Distinct katatonic attacks were several times observed, taking the form either of short fainting fits with tonic spasm and froth on the lips, or of a seizure resembling hysteria. Amongst the somatic symptoms, irregular and slow pulse was observed at the commencement, and cyanosis of the skin was marked in many cases, while other vaso-motor phenomena were frequent during the stupor. One third of the cases recovered completely, and about 15 *per cent.* more incompletely, so that the prognosis is not necessarily unfavourable.

The katatonic symptoms are not in themselves characteristic of any

one disease. Still, the establishment of katatonia as an independent morbid entity is thoroughly justified, but its limits must at present be described as extremely ill-defined.

Starting with the view of Sommer and Kraepelin that the various katatonic symptoms (catalepsy, echolalia, echopraxia, negativism, stereotypy of deportment and movement, persistence of ideas, mannerism and impulse) have the same psychological basis, *R. Vogt* seeks to reconcile and enlarge upon the explanatory principles of these two authorities, *viz.*, stereotypy and suggestibility. He calls to his aid the theory of James as to the action of the will (the function of which is, according to this author, to remove from consciousness all ideas of action except one, which, being left alone, inevitably produces the corresponding action), and the doctrine of Müller that the physiological processes which accompany a content of consciousness persist after that content has sunk beneath the threshold of consciousness, until a new content enters the field; and that so long as they last the original idea can very readily be excited again. In katatonia the power of persistence of the psycho-physical functions is especially great; hence the tendency to continuance or repetition of a recent innervation. The oftener the same psychical process is repeated, the greater the ease with which it is reproduced; hence stereotypy. Suggestibility, however, demands, in addition to increased power of persistence, a narrowing of consciousness, as in hypnosis. The idea of position caused by raising an arm, for instance, causes a maintenance of the arm in position only so long as no other idea of position enters consciousness. For the same reason any chance erratic stimulus, entering consciousness, may issue immediately in impulsive action. Negativism may be explained by a specially high tendency to persistence, and so on.

Increased power of persistence, and narrowing of consciousness, are parallel phenomena, and suffice to explain all katatonic states.

W. R. DAWSON.

6. Treatment of Insanity.

On the Means of allaying Excitement in the Insane [*Die anwendung von Beruhigungsmitteln bei Geisteskranken*]. (Published by Carl Marhold, Halle-a.-S., 1903.) Pfister, H.

In this short treatise the author deals systematically with the various means at our disposal, both within and outside the walls of the asylum, for combating the symptom *excitement*. His teaching will appeal more directly to those upon whom may be forced, for various reasons, the thankless task of endeavouring to treat the mental case in the private dwelling, but he does not fail to urge the advantage which, in the great majority of cases, the asylum offers.

Naturally, the first object to be attained is the removal of the exciting cause, as, for instance, when poisons such as alcohol, lead, mercury, morphia, cocaine, etc., underlie the manifestation. The like endeavour must hold in those infections, such as malaria, syphilis, pyæmia, in which we possess more or less power of control over the poison.

Further, a knowledge of the etiology is of therapeutic value to us when a neurosis (epileptic, hysteric, neurasthenic) is prominent in the case. However, more often than not we are compelled to treat the symptom *excitement* empirically.

This empirical treatment he classifies under two heads—"somatic" and "by special methods."

Under *somatic* come the general hygienic and dietetic rules to be observed, and stress is laid here upon the importance of a full dietary and the necessity for forced alimentation in cases of refusal of food, especially when excitement is prominent. If a history is lacking, but complete abstinence is suggested by the symptoms, Professor Pfister urges that we should not delay the forced alimentation if the breath smells of acetone and this substance is found unmistakably in the urine. This is a very important point, and should be of the greatest value in both asylum and general practice if it can be relied upon. Legal's nitro-prusside reaction is the test recommended by Tuczek.

How long shall we delay forced alimentation when we have accurate knowledge of the time the fasting has lasted? Not longer than five days, we are told, even when we have to deal with vigorous patients who are quite quiescent, and who, moreover, take water; but in the case of the weakly, from whatever cause (convalescence from acute disease, tubercle, etc.), and in those plagued by excitement and unrest, the delay must at the longest be two to three days, or even less should premonitory symptoms of exhaustion declare themselves. These periods of delay will probably be regarded in this country as too prolonged. The technique of forced alimentation by means of the tube is next carefully described. The nose is to be always chosen, and inasmuch as a careful examination of the nasal passages is not generally feasible, that passage is to be selected through which the air passes most freely. Among the precautions to be taken in order to avoid such disasters as the passage of food into the air-passages, the auscultation of the stomach whilst a puff of air is driven into the nasal tube (by means of a Pollitzer or other rubber ball) is advised. The tube itself should be passed either just into the cardiac orifice or, just above this, into the lower end of the cesophagus; this is preferable to passing it deeper into the stomach. All kinds of food may be administered by the tube, but in general the writer states that in his experience $\frac{3}{4}$ litre ($1\frac{1}{2}$ pints) of milk, three eggs, 150 g. (5 oz. about) of sugar administered twice a day (in exceptional cases thrice daily) will suffice during months, or even as long as a year. To this, water, lemon juice, alcohol, medicaments, etc., may be added according to the indications present.

The nutritive injection is next discussed. It is advised that it should be of thickish consistence, and that it should not exceed $\frac{1}{2}$ litre (9 oz. about) in bulk, and be repeated not oftener than two to four times in the twenty-four hours. However, the examples which are quoted exceed this quantity. We are glad to note that the bulk of this form of enema is of a more reasonable magnitude than that which is often recommended.

A short paragraph on subcutaneous alimentation follows. It is far too short for the interest of the subject, and in point of fact wholly inadequate, since it sets down as substitutes one for the other physio-

logical saline solution, solution of glucose, and well-sterilised olive oil!

The value of rest, in particular rest in bed, of warmth, of hydro-pathic methods, including the prolonged and the continuous bath and the wet pack,—these precede the consideration of drug treatment. Under the latter heading, we note the caution that opium is to be carefully watched when administered to mental patients who suffer from heart or kidney disease. Is this the experience of alienists in this country? for not only do we rely on opium in general hospital practice in our treatment of heart failure, but even in kidney disease we give it much more freely than we used to do.

Under bromides we find the inclusion of bromipin, in 20 to 40 g. doses (300 to 600 grains), in the list of established remedies; but the sovereign remedy, "to be preferred to nearly all other sedatives," is scopolamin (hyoscin). It may be given by the mouth, but is better injected subcutaneously. Its dosage is the one usual in this country, *viz.*, $\frac{1}{100}$ to $\frac{1}{10}$ grain, though Dr. Pfister places it more nearly at $\frac{1}{100}$ to $\frac{1}{75}$ grain (0.0005 to 0.001 g.). The combination of morphia in $\frac{1}{4}$ to $\frac{1}{8}$ grain with the scopolamin is recommended in certain cases where dread or apprehension characterises the agitation. Paraldehyde is preferred to all other soporifics, "not alone on account of its absolute safety," but because there are no contra-indications with the exception of the severest forms of stomach disease. In alternation with paraldehyde, dormiol, hedonal, amylene hydrate are all mentioned as suitable, but as not possessing any marked claims. Chloral hydrate, sulphonal, and trional are not forgotten.

The moral (psychic) treatment is dealt with in the final section of this really excellent brochure.

HARRINGTON SAINSBURY.

On High Altitudes for Nerve Cases [Ueber Höhenkuren für Nervenleidende]. (Published by Carl Marhold, Halle a. d. S., 1903.) Laquer.

Phthisis is no longer to enjoy a monopoly of the higher levels of country. Observations made in Davos and at St. Moritz have pointed to the advantages which the nervous system may derive from high altitudes, and physiological observations on the metabolism and on the composition of the blood, under the conditions which there obtain, show cause why this should be.

Interesting considerations by the writer upon the meaning and definition of the word "climate" lead up to the actual physical peculiarities which belong to the high level *per se*, *viz.* :

1. A thin air.
2. A low temperature of the air, especially in the shade and by night.
3. A frequent and abrupt variability in the hygroscopic state of the air, together with an *average* marked dryness.
4. Strong air movements (in summer more than in winter) caused by local winds, and the greater force of winds in general.
5. The greater intensity of the sun's rays, caloric and luminous.
6. The energetic evaporation present.
7. The purity and clearness of the air, the presence of ozone, and the marked positive electric state of the atmosphere.

Of these factors, 5, 6, and 7 play, in all probability, the chief part, and they serve as a marked stimulus to the functions of the body. The respiration is thus stimulated, though within a few days the normal is re-established. The chemistry of the body is stimulated, and notably the red cells of the blood are increased in number, and the hæmoglobin percentage is correspondingly raised. This change may continue for some weeks before the normal re-obtains. The circulation follows suit, and an acceleration of the pulse is noted, but it is not long maintained.

These changes are often accompanied by symptoms of irritation, *e. g.*, dyspnœa, shortness of breath, palpitation, etc.; asthma-like attacks may occur, and the patient may complain of fulness in the head and of anorexia. These constitute the symptoms of acclimatisation, and they last often one or two weeks. The acclimatisation symptoms may trouble even the healthy, and *a fortiori* those with deranged nervous systems may feel them acutely; for this reason the ascent should always be made by as easy stages as possible. Therefore time must be given for the organism to adapt itself to the altered surroundings, and since this adaptation may delay it is useless to make short visits to high stations. "There are no six weeks' cures amid ice and snow." The class of nervous patient most suitable for this treatment is, according to Laquer, the functional disease class alone, and of this class the subjects of neurasthenia rather than of hysteria. Sexual neurasthenia indicates the treatment, also certain ill-defined psychopathies, *e. g.*, the tendency to brood and the cyclothymias. Where the psychopathy is attended by anæmia or chlorosis the high altitude is specially called for. One is surprised to hear that certain cases of Graves' disease do well on the high levels; the cases must not be of the severe type, it is said, but it is a surprise that the vascular excitement, which is so prominent even in the milder cases, should bear the acclimatisation test.

Dr. Laquer's cautious presentation of the case appears to us very wise.

HARRINGTON SAINSBURY.

A Contribution to the Question of Certain Alleged Toxic and Therapeutic Properties of the Blood-serum of Epileptics. (Neurol. Cbl., Sept. 16th, 1903.) Sala and Rossi.

The above-named investigators record, in full, five cases, in which they claim to have carefully investigated the metabolism of the patients on a fixed diet during the periods both of serum and of non-serum treatment. Ceni, whose theory was under examination, does not appear to have proceeded very scientifically in this matter, neither maintaining a constant diet nor withdrawing the organism wholly from the action of other medicaments, nor keeping a watch upon the functions of the organs severally (the last from the point of view of an altered metabolism, as asserted by Ceni). The conclusions arrived at are—

1. That injections with the serum of epileptics have no influence upon the course of the disease.

2. That at no time did the injections give evidence of the presence of a toxic substance in the serum; that, on the contrary, the organism appeared to be wholly indifferent to them.

HARRINGTON SAINSBURY.

Epilepsy and Serum-therapy. (Riv. di patol. nerv. e ment., Sept., 1903.) Catòla.

Dr. Catòla records results similar to Sala and Rossi (see above). He concludes that Ceni's views are neither confirmed by the results of direct experiment, nor are they justified theoretically from a consideration of the phenomena of cellular biology. Dr. Catòla's cases were seven in number, and they were carefully selected so as to make them as favourable as possible from Ceni's point of view.

HARRINGTON SAINSBURY.

Paraldehyde Delirium and the Effects of Paraldehyde [Ueber Paraldehyddelir und über die Wirkungen des Paraldehydes]. (Monats. f. Psychiat. und Neurolog., Aug., 1903.) Probst, M.

Paraldehyde was first used by Cervello in 1883 as a hypnotic. It was found that injections of from two to three grammes in rabbits and dogs in five minutes caused narcosis lasting for six or seven hours. In larger doses, it causes death through paralysis of respiration with reflexes diminished. Bokai and Barcsi thought that after taking paraldehyde the vessels of the brain were widened, whereas Curci states that the drug causes anæmia of the brain, as do chloroform, ether, and chloral. It is agreed that large doses of paraldehyde paralyse the inhibitory powers of the intestines, the result being much peristaltic action.

Cappelli and Brugia were able to study the effects of paraldehyde on two men in whom there was a gap in the bony covering of the roof of the skull. They could observe a slight shrinking of the volume of the brain, and noted, with Mosso's sphygmograph, first a diminution and then a considerable increase of volume in the forearm. The ordinary effect of a dose of paraldehyde is a pleasant feeling of warmth from five to fifteen minutes after, then drowsiness, passing into a dreamless sleep which lasts for about seven hours. The reflex excitability is somewhat lessened, though the pupils still react. The temperature sinks slightly. The pulse is a little slower, but fuller; the respiration deeper and less frequent. The smell of the drug exhaled by the lungs lasts till the next day. It cannot be traced in any other excreta.

Paraldehyde has been used on a great scale in the asylum at Vienna, and Dr. Probst regards it as the least harmful of all the hypnotics in use. Quantities much greater than the ordinary medicinal doses have been taken without loss of life; indeed, there is no instance on record of poisoning with paraldehyde.

Kraft-Ebing mentions a man who for a year took about thirty-five grammes of paraldehyde every day, the result being trembling and muscular weakness and dulness of feeling. Another patient daily took five grammes for thirteen years with no bad effects. Dr. Mackenzie gives the case of a woman who by mistake swallowed three ounces of paraldehyde; she slept for thirty-four hours; the pulse rose to 120, the respiration from 40 to 60. Probst observed a patient with myelitis who took fifty grammes of paraldehyde; he slept for twenty hours and then recovered. He also describes at length the case of a lady thirty-eight years of age, who had for several years been given to the misuse of

paraldehyde, which she took not only to cause sleep, but for its soothing effects during the day. Having taken one hundred and fifty grammes in thirty-six hours, she fell into a faint and torpid state, but did not sleep. She groaned and stuttered and made senseless remarks; her face was livid, and she had nausea and vomiting. She felt at once drowsy and excited. She lay in bed without sleeping for five days; on the seventh day, after a long sleep, she recovered. Probst refers to two other cases where the paraldehyde seemed to produce delirium with hallucinations, sleeplessness for several days, ending in recovery after a long sleep.

WILLIAM W. IRELAND.

The Care of Incipient Insane and Borderland Cases, as illustrated by Military Practice. (S. African Med. Rec., May, 1903.) Darley-Hartley, W.

In the second half of 1901 it was decided to mass at Cape Town the whole of the insane in the South African command except Natal. Dr. Darley-Hartley was placed in charge of the reception hospital, and in this paper he details his experiences and the conclusions he drew from them during the eleven months he remained in that position. He had under treatment 306 cases in all, some staying with him eight or nine months, some a few weeks, while others only stayed two or three days. This naturally renders his percentage of recoveries mere guesswork, but he is of the impression that quite 65 *per cent.* left recovered or in such a condition as to enable him to count confidently upon their recovery in a few weeks. He describes the many difficulties he had to contend with as to accommodation, etc., and is strongly of opinion that if so much could be done for incipient cases under these conditions, which could be easily obtained and even improved upon in any general hospital, the need in civil life for halfway houses between the home and the asylum for incipient and borderland cases should at once receive attention. Any provision, he thinks, for the reception and early treatment of these cases should be absolutely separated from identification with asylums, and, if possible, associated with institutions for the treatment of general diseases. He suggests that a ward or wing of a general hospital might be set apart for the reception of the incipient insane, neurotics, and the subjects of paralyses and other organic nerve diseases, under the charge of a physician competent to treat them all, but whose care of other than purely mental cases would remove any imaginary stigma from those on the borderland of insanity who might seek treatment in his wards.

A. W. WILCOX.

7. Sociology.

How a Settlement for the Family Care of the Insane could be established and organised in Italy [Come si può impiantare ed organizzare in Italia una colonia familiare per alienati]. (Riv. sper. di Frenia tr., vol. xxxix, p. 324.) Ferrari, G. C.

The enormous increase, real or apparent, of the insane, and the overcrowding of asylums, with its baleful effects, have made themselves as

much felt in Italy as anywhere, and have weighed more painfully than in most places owing to the fiscal condition of the country. All eyes are turned towards any means of relief. Ferrari, in approaching the general aspect of the question, quotes Tamburini: "In Italy, through ardour for the study of the renewed science of psychiatry, that branch of our specialty is somewhat forgotten which is so essential for the scope of all our studies,—that is to say, the cure and the care (*assistenza*) of the insane." As Tamburini is one of the foremost lights in scientific psychiatry, and is director of an asylum second to none in its output of laboratory and clinical work, in its arrangements for the employment of patients, and in the advanced nature of the provisions for their comfort and well-being, he cannot be supposed to be prejudiced, and his saying has the more weight as indicating a real want. To deal with the present crisis Ferrari proposes the establishment not merely of family care around asylums, as has been done already in several places (notably Reggio-Emilia), but the foundation of settlements for the insane on the lines of the great French settlements for the patients of the Seine department. It is calculated, he says, to relieve the overcrowding of asylums in a logical way, and in a spirit and character which are strictly scientific and humane. It will undoubtedly lessen the terrible increase in the number of the insane, and will thus serve to restore elasticity to local finance. Finally, it has the advantage that it may be looked upon with favour and support by a judicious central government, which can assist by awakening local energies in various ways as the occasion offers. There are no general rules as to the foundation of settlements, for no existing settlement very closely resembles another; therefore it is necessary to study the subject individually with reference to the condition and needs of each country. The author proceeds to examine into the possibilities of establishing this mode of care in Italy. Extensive districts which have lost much of their population through emigration present local conditions favourable to the scheme. Ferrari seems not to disapprove of beginning by placing patients with former asylum attendants, but thinks this would only go a little way; and he would seek to interest the better classes and those responsible for local government, who might again rouse the peasants to undertake the work. Thus, he points out, the family care of orphan children was undertaken, and such affectionate relations often sprang up that the children were retained when no longer paid for, and only forming another hungry mouth at the poor man's table. In connection with this, Ferrari urges that it would be unwise to appeal only to the most sordid instincts of the peasant, and represent the whole question of family care as merely a means of making money. If you do this you arouse the suspicion of a suspicious class, and the peasant will at once try to overreach you. These people are so accustomed to regard their betters as their enemies that they will sooner accept your sentiments and respond to them than give credit to the notion that you are offering a good bargain without some ulterior motive. It were, therefore, well to appeal to the humanity of the people rather than immediately to their pockets.

It is always to be remembered that favourable locality and willing and high-minded hosts will not make family care a success without careful

selection of the patients, who must be thoroughly and familiarly known by the experienced physician before they can be entrusted to their hosts. This preliminary skilled study Ferrari insists upon as the only path to success, or even to safety. Furthermore, he would not use the settlement as a substitute for the asylum, but as a supplement to it. He thinks that it is contrary to common sense to send to a *régime* of liberty, patients not able to enjoy or benefit by liberty—the paralytic, the dirty, the helpless. He would exclude the epileptic insane, with perhaps the exception of those who only take rare nocturnal fits; also the impulsive. Alcoholists are a source of perpetual danger. With the great divisions of the agitated, the melancholic, the paranoiac, the demented of various classes, individualisation is necessary. All present suitable and unsuitable cases. The settlement in Ferrari's opinion should not in each case exceed the number of 400 patients; otherwise it must be so scattered that supervision becomes difficult. An infirmary is needed having beds on the ratio of 5 *per cent.* or 6 *per cent.* to the total number of patients; also bath-houses, scientific laboratories, etc. The details of medical care are well described, and an interesting picture of life in a settlement is given, drawn from the facts of the French settlement at Aisnay-le-Château. Finally the question of probable cost is discussed, which is important in Italy, since we are told many provinces find themselves in grave financial straits. On the whole it is desirable, the author says, to imitate the methods which so wide an experience in time and space has proved beneficial for so many patients, methods which recent examples have shown to be comparatively easy of actual execution, and which are undoubtedly economical.

CONOLLY NORMAN.

The General Evolution of the Care of the Insane [L'évolution générale de l'assistance des aliénés]. (Riv. spec. di Freniatr., vol. xxix, p. 611.) Madame Marie.

The helpmate of our colleague of Villejuif, who, besides his many contributions to science, has made so distinguished a mark in psychiatry by inaugurating the noble colony of Dun-sur-Auron, here relates briefly, but with much literary skill and the kindest feeling, the interesting story of the progress in the care, and especially the family care, of the unsound of mind. She begins by stating that her subject will be the discussion of the care of insanity such as it now is, such as it has been, and such as it can and ought to be. The history of the primitive asylums is full of instruction, and ought never to be forgotten. In outline, at least, it is familiar to most readers of the *Journal of Mental Science*. It will therefore suffice here to note that we are told, "Russia, which was one of the last to enter upon the path of progress, is proceeding thereon with giant steps, and has overtaken other countries, even outrunning them on certain points." The late Dr. Korsakoff, so well known for his clinical work, was the apostle of non-restraint in Russia.

As an example of a modern asylum, Madame Marie takes Villejuif, at Paris. It contains 1800 patients, male and female, and is divided into four medical services, two for each sex. Each service, again, contains four divisions: one for quiet working patients, one for the excited,

one for the unclean who are confined to bed, and a reception infirmary. The general arrangements of an asylum are dealt with, special attention being given to the growing favour shown to the treatment by rest in bed.

All the best exertions of the asylum physician are baffled by overcrowding and accumulation of patients. France here tells the common story. The law of 1838 provided for 20,000 patients; there are now 80,000 to be provided for. It is necessary, therefore, to check the accumulation in asylums of patients for whom asylums are not absolutely necessary, and to adopt some method of care at once less embarrassing, cheaper, and more in accordance with the liberal and humane principles in vogue since Pinel. Madame Marie thinks that mental medicine has now made sufficient progress to enable its professors to make a sufficiently accurate diagnosis as to which individual cases can safely return to a modified and safeguarded social life. She disavows the intention of intruding into what is purely the physician's domain, and therefore she does not discuss what is theoretically feasible, but points to accomplished facts. The facts as to family care are certainly very strong, and may well speak for themselves, since any one can see the great modern settlements in Belgium and France, not to mention the smaller centres in Germany, Russia, Italy, Holland, Austria, etc. Of these Madame Marie naturally dwells chiefly upon the French settlements (Dun-sur-Auron, with Aisnay-le-Château and the other annexes), which now provide for 1100 patients. She is too discreet to claim perfection for the method which she admires. The hosts who take in patients "are not saints any more than the attendants in closed asylums." [As it would appear that there was a suicide in Levet in 1901, that taking all the settlements together there are, on an average, about two escapes per annum, and that it is recorded as a serious accident that three patients went out for a walk one evening, were lost, and spent the night (winter or summer is not specified) out of doors, it must be admitted that the best laid plans of Dr. Marie, as of other men and mice, "aft gang agley."] An interesting anecdote is told in this paper which shows what an amount of freedom these patients enjoy. At Dun there exists a custom (called the *louée*) well enough known in Ireland and Scotland as the "hiring fair." Servants wishing to "hire" wear a flower or bunch of leaves. The patients are frequently to be seen carrying this token and trying to haggle with hirers, and it has even happened that the latter have been deceived and have thought to clench a bargain.

Madame Marie, besides advocating the hetero-familial method of care, is strongly in favour of the homo-familial where that is possible. If one might venture upon a single correction of this brilliant lady's paper, Dr. Conolly, of Hanwell, was not, in the ordinary acceptation of the term, a Scotchman; he was born in England of an English mother, but by name and lineage he was an Irishman. CONOLLY NORMAN.

Part IV.—Notes and News.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

EXTRAORDINARY MEETING, followed by the ORDINARY GENERAL MEETING, held at the Medical Society's Rooms, 11, Chandos Street, Cavendish Square, on Wednesday, 18th November, 1903; Dr. Ernest W. White, President, in the chair.

Present—*Members*: Drs. W. L. Andriezen, H. Barnett, F. Beach, H. A. Benham, C. H. Bond, D. Bower, A. N. Boycott, A. H. Boys, R. Brayn, J. F. Briscoe, J. Chambers, W. C. Clapham, R. H. Cole, H. Corner, M. Craig, F. W. Edridge-Green, G. S. Elliot, H. E. Haynes, H. G. Hill, C. K. Hitchcock, T. B. Hyslop, G. H. Johnston, J. C. Johnstone, R. Jones, W. S. Kay, W. R. Kingdon, R. Legge, H. W. Lewis, H. C. MacBryan, P. W. Macdonald, T. W. McDowall, H. J. Macevoy, W. J. Mickle, H. H. Newington, B. Pierce, J. F. Pieterston, G. Potts, N. Raw, H. Rayner, J. P. Richards, R. P. Smith, W. M. Smith, R. Steen, R. S. Stewart, R. C. Stewart, F. R. P. Taylor, T. S. Tuke, A. R. Urquhart, L. A. Weatherly, E. W. White, J. R. Whitwell, J. Wigglesworth, A. Wilson, T. O. Wood.

Visitors.—Messrs. A. Ludovic and O. L. Theobald.

An apology for non-attendance was received from Dr. A. R. Turnbull.

The PRESIDENT.—Gentlemen, we have first an extraordinary meeting in connection with the new articles and bye-laws of the constitution. I believe you have all had a copy of them with your summons. The Chairman of the Rules Committee, Dr. Urquhart, will be prepared to answer any questions, and give any explanation which may be desired. Mr. Wigan, our Solicitor, is also present to tell you about any point connected with the legal aspects of the case. And let me impress upon all of you who are going to discuss this matter to be as terse as possible, because we hope there will be no material alteration made upon the points which were adopted at the annual meeting. It is necessary for us to carry this through to-day if possible, and then we must have yet another extraordinary meeting to confirm the articles and bye-laws.

Dr. ROBERT JONES (General Secretary) read the notice convening the meeting as follows:

"Notice is hereby given that an Extraordinary General Meeting of the Medico-Psychological Association of Great Britain and Ireland will be held at 11, Chandos Street, Cavendish Square, London, W., on Wednesday, the 18th day of November, 1903, at 3 o'clock in the afternoon.

"(1) To consider and if thought fit approve the draft new regulations which will be submitted to the meeting, and in the event of the approval thereof with or without modifications.

"(2) To consider and, if thought fit, to pass a resolution to the effect 'that the new regulations already approved by this meeting, and for the purpose of identification already subscribed by the Chairman thereof, be and the same are hereby approved, and that such regulations be and they are hereby adopted as the regulations of the Association, to the exclusion of all the existing regulations thereof.

"(3) To consider and if thought fit approve the draft bye-laws which will be submitted to the meeting."

Should the said resolution be passed by the required majority it will be submitted for confirmation as a special resolution to a second extraordinary meeting, which will be subsequently convened.

Should the said draft bye-laws be approved with or without modifications, the same with such modifications (if any) will be submitted for adoption as the bye-laws of the Association at a further extraordinary meeting which will be subsequently convened.

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Copies of the proposed new regulations and of the proposed bye-laws are enclosed.

By order,

ROBERT JONES, *Secretary*.

Dr. URQUHART.—Mr. President and gentlemen, in accordance with the notice that Dr. Jones has just read, I now move that the regulations submitted to this meeting be approved. The regulations have been distributed, and, as far as I know, they have been generally approved by the members of the Association. I recall what the President has just said, that we arrived at an honourable understanding at the Annual Meeting that whatever was the plain intention of the Annual Meeting should be put into print, adjusted by Mr. Wigan, our solicitor, and submitted to the meeting this afternoon. Mr. Wigan has given this matter a very great deal of attention, and he has now adjusted these Articles of Association and bye-laws. I hope you will agree with me that his efforts to place us in the best possible position in regard to the organisation of our Association have been most successful. There are one or two printer's errors in the copies that have been distributed, and there are one or two suggestions which Mr. Wigan will take into consideration; and these, I hope, will be sufficient to make them as perfect as rules can be. On page 17 we propose that the Dependency should come before the Colonies. In No. 24 the word "nor" should be changed to "or;" and in 26 we thought that we had made it sufficiently plain that the rule should mean that every Divisional meeting should have the same facilities for altering nominations as every Annual Meeting, and the rule is now framed on that principle; viz. if by reason of death or disaster it is necessary to change the name, there should be power to change the name if nominated by six members. As some doubts have arisen, Mr. Wigan is here to give his attention and consideration as to how this is to be managed to put it beyond dispute. The intention of the rule is perfectly clear, and it now remains for the lawyer of the Association to fit the words, so that no dispute hereafter may arise. On page 22, rule 56, the word "Divisional" has to be inserted after "Quarterly." Form E, on the last page, is to be approximated to form D by having another column inserted, so that the name of a proposed member may be inserted in that column. The words "General Secretary" on page 36, fourth line from the bottom of the page, are obviously a misprint for "Divisional Secretary." I think these are all the points to which our attention has been drawn, and I therefore move—and I hope it will be accepted by this meeting—that the proposed regulations be approved.

Dr. SAVAGE.—I have been asked to second this proposition, and I have great pleasure in doing so formally. I am afraid I am not in a position to be cross-examined upon all the rules, but as far as I have been able to see the modifications seem to be just and proper, and I have great pleasure in seconding their adoption.

The PRESIDENT.—It has been moved by Dr. Urquhart and seconded by Dr. Savage that the Articles of Association and Bye-laws, as amended, in modified form, be approved. If anyone has any remark to make upon this matter, now is the time. If not, I will put this to the meeting, that the Articles of Association and Bye-laws in their amended form be approved.

The resolution was carried unanimously.

Dr. URQUHART.—I have now to move resolution No. 2, "That the new regulations already approved by this meeting, and for the purpose of identification already subscribed by the Chairman thereof, be and the same are hereby approved, and that such regulations be and they are hereby adopted as the regulations of the Association, to the exclusion of all the existing regulations thereof."

Dr. SAVAGE.—I beg to second it; and I would add one word to the seconding. It is that I think we ought to thank Dr. Urquhart for the great pains and labour that he has expended upon this work. I think it would be wrong of me to second this resolution without acknowledging that. (Applause.)

The resolution was then put to the meeting and carried unanimously.

Dr. URQUHART.—I now propose resolution No. 3, "To approve the draft bye-laws submitted to this meeting." They constitute the second part of these rules, and these, or as they may be altered, will be binding upon the Association. We have endeavoured, with Mr. Wigan's co-operation, to make as many bye-laws as possible, so that in the changing circumstances of the Association they may be modified from time to time. I now ask you to approve of the bye-laws.

Dr. SAVAGE.—I beg to second that.

The President then put the resolution, and it was carried without dissent.

Dr. URQUHART.—This concludes the resolutions which are necessary to-day, to carry through what we have been engaged on during these last two years. I feel very grateful indeed to Dr. Savage for the kind way in which he has spoken of our work. As you are aware, the Committee which has been long engaged on this matter have given a great deal of attention to it, and have had many meetings. And although I acknowledge thanks for myself, I would specially do so on behalf of the Committee, and express our thanks to you for the kind way in which you have received our labours. There is one point more, and that is a most important one, and I would ask you, Mr. President, to add a word in regard to the second special meeting which has to be held. If this next special meeting is not held upon the date named, the whole of our labours will become of none effect. And we must depend upon those of our members who are in the vicinity of London to come here without fail, to the number of at least ten. We want to-day to get fifteen men pledged to come here to carry through the remaining resolution in order to make these new laws binding upon the Association. I do hope that Dr. Jones will be so supported by those who live in proximity to London that he will not have any difficulty in getting a sufficient number to form a quorum, to complete the work which now remains to be finished by a final special meeting.

The PRESIDENT.—This second extraordinary general meeting must be held on the 17th day of December, at 4 o'clock in the afternoon. I hope you will all take a note of that. Notice will be sent to everybody, but it is all-important we should have our quorum, twice over if possible, to make sure. Otherwise everything falls to the ground. I hope we shall have pledges from at least fifteen to twenty to carry through this work, which Dr. Urquhart tells us has occupied two years, and has closely engaged the best energies of a special committee.

ORDINARY MEETING.

The PRESIDENT.—The minutes have been already published in the JOURNAL, and, with your permission, we will save time by taking them as read. Agreed.

The following gentlemen were elected ordinary members of the Association:—Cormac, Harry Dore, M.B., B.S., Madras, Assistant Medical Officer, Wilts County Asylum, Devizes (proposed by J. Ireland Bowes, H. Hayes Newington, and Robert Jones); Dow, William Alexander, M.D. Durham, M.R.C.S., L.R.C.P. Lond., Medical Officer, H.M. Prison, Lewes, and Surgeon, Royal Naval Prison, Lewes (proposed by H. Hayes Newington, F. W. Mott, and Robert Jones); East, Guy Rowland, M.B. Durham, Assistant Medical Officer, Northumberland County Asylum, Morpeth (proposed by T. W. McDowall, J. T. Callcott, and Robert Jones); Hankin, Chella Mary, M.B. Durham, Assistant Medical Officer, Northumberland County Asylum, Morpeth (proposed by T. W. McDowall, J. T. Callcott, and Robert Jones); Mackenzie, Theodore Charles, M.B., Ch.B. Edin., Assistant Physician, Royal Edinburgh Asylum (proposed by James M. Rutherford, G. Douglas McRae, and C. C. Easterbrook); Nelis, William F., M.D., Senior Assistant Medical Officer, Monmouthshire Asylum, Abergavenny (proposed by J. Glendinning, F. W. Mott, and Dr. H. Kerr); Savill, Thomas D., M.D. Lond., Physician to the Hospital for Nervous Diseases, Welbeck Street, London, W., 66, Upper Berkeley Street, London, W. (proposed by Geo. H. Savage, W. J. Mickle, and Albert Wilson); Skinner, W. A., M.B., Assistant Medical Officer, Natal Government Asylum, Pietermaritzburg (proposed by James Hyslop, H. Hayes Newington, and Robert Jones); Sutherland, David, M.B., Ch.B. Edin., Pathologist, Wadsley Asylum, Sheffield (proposed by Walter Smith Kay, T. S. Adair, and William Vincent); Whittingham, George M., M.R.C.S., L.R.C.P., Assistant Medical Officer, Earlswood Asylum, Redhill, Surrey (proposed by Charles Caldecott, Frank H. Pearce, and Robert Jones).

COMMUNICATIONS.

Dr. NATHAN RAW read a paper entitled "The Relation of Mental Symptoms to Bodily Disease, with special reference to the Treatment of Temporary Forms of Insanity *outside* Lunatic Asylums" (see page 13).

Dr. R. S. STEWART read a paper entitled "The Mental and Moral Effects of the South African War, 1899—1902, on the British People" (see page 1).

Dr. W. MAULE SMITH gave a lantern demonstration of microscopical slides illustrating "*Fragilitas Ossium in the Insane.*"

He said that in a former communication on this subject, consisting of an analysis of 200 cases, it was shown that morbid softening of the bones was present at an earlier age in female than in male cases, that it was rare before the age of forty-five, and that it was mostly marked in cases of dementia and in general paralysis. The changes that take place in the bones are compatible with the idea that they are produced by a disturbance of the trophic influence exercised by the sensory nerves on osseous structures. The softening is associated with degenerative changes in the posterior spinal ganglia, the peripheral nerves, and also in the cells of Clarke's column in the spinal cord. The morbid process in the bones begins by a dilatation of the central Haversian spaces, which encroach upon similar dilated spaces, and so form a loose cancellous structure. The change passes slowly from the central medulla and invades the dense bone. The change is apparently entirely one of absorption in those parts nearest to the blood-stream. Additional proof of this is seen at the periphery, where the periosteum sends in small nerve twigs and blood-vessels to the superficial layers of bone, and where the Haversian spaces in that region are much larger than those underneath. The spaces are filled either with a small cell tissue or with an areolar tissue, the meshes of which are partially filled with fat globules. There is no attempt at bone formation either regularly or irregularly. These changes are well seen in (a) a humerus which was the seat of fracture, and where the dense bone was reduced to a mere thin shell; (b) a femur, where the thin dense layer of bone passing over the upper surface of the neck and head had completely disappeared, and where the calcar femorale had become absorbed and the neighbouring dense bone reduced in thickness. Similar absorptive changes were seen in sections of a rib and clavicle. Slides prepared from microscopic sections of posterior spinal ganglia taken from various cases showed intense pigmentation of the ganglion cells. The shape of the cells was much altered, the nucleus displaced, or absent altogether, or completely surrounded by the dark brown pigment. Marked gross lesion was observed in the fibres stained by Weigert Pal's and by Heller's method. Many of them did not retain the stain, others only feebly, others irregularly, so that varicosities were well marked along the course of the fibre. Other slides from sections of peripheral nerves, prepared also by Weigert Pal's and Heller's method, showed changes similar to those met with in the ganglion fibres. Preparations of nerve by osmic acid staining showed traces of Wallerian degeneration. In a case of old fracture these changes seemed to be intensified. A comparison between the anterior cornual cells and those of Clarke's column showed the former to be well formed, their Nissl bodies to be well stained, and their fibres to be long and healthy in appearance as compared with the latter, which were pigmented, badly stained, and stunted.

The PRESIDENT said that he was sure all were indebted to Dr. Maule Smith for the demonstration. Alienists had known for many years how closely associated fragility of bones was with general paralysis of the insane and the chronic forms of dementia. It was a very interesting fact that there were associated degenerative changes in the posterior spinal ganglia and in the peripheral nerves. He remembered that some years ago Dr. Campbell, of Rainhill, gave a demonstration before the Society of the extent of the resistance to breaking strain of the bones in general paralytics, and as an additional contribution the present demonstration was very valuable.

Dr. HAYES NEWINGTON, referring to the same occasion as the President mentioned, which must be eight or nine years ago, said it was stated at the time that softness of bone in the insane was only heard of at the inquest, and that view was strenuously contested in justice to attendants. If the present photographs had been available at that earlier meeting there would hardly have been room for such a statement, even from the most doubting superintendent.

Dr. ROBERT JONES said he was present at the time when it was stated in that room by a superintendent of an asylum that to state that the bones were softened in cases of insanity was to play with the credulity of the jury, and that the statement was made to make it smoother for those in authority with regard to the

verdict which the jury were about to deliver. Several members of the Association at that meeting took strong exception to the terms in which the subject was discussed. At Swansea recently, at the meeting of the British Medical Association, and in the section "Psychological Medicine," of which he (Dr. Jones) had the honour of being President, Dr. Maule Smith read an original and well-compiled paper on the fracture of bones in the insane; and he then approached Dr. Maule Smith with the view of enlarging upon the subject by demonstrating pictures, which he consented to do at the present meeting. They showed a vast amount of work, work which all members respected, inasmuch as it was Dr. Maule Smith's own investigations, and especially as it came from an institution under the distinguished superintendence of Dr. Bevan Lewis, whose work all alienists admired. The first few pictures showed unmistakably an unnatural condition of the bones. He (Dr. Jones) had been thoroughly convinced of the changes which occurred in the bones of the insane from very considerable experience in the post-mortem rooms. He had seen bones which had snapped between the finger and thumb, and Dr. Smith's slides showed that there was almost complete absorption of cancellous tissue, and only a very thin layer of compact bone left in the long bones of the body. He (Dr. Jones) congratulated the Association upon the papers which had been read that day; a preventive paper to begin with, and in between a sociological contribution of great value and interest, with an eminently practical demonstration to sum up with. He hardly remembered any meeting of the Association which had been so successful as the present one, and he desired to convey his thanks to Dr. Maule Smith for his very clear and convincing demonstration.

Mr. J. F. BRISCOE said he was particularly interested in the subject, having read a paper on the osseous system in the insane some years ago. Perhaps the specimens might have been sharper with methylene blue screen, but they were good. In his (Mr. Briscoe's) paper he expressed the hope that somebody would undertake to investigate the pathology of bone disease in the insane. He reminded members of the many causes, both pathological and otherwise, which could predispose to fracture. By *fragilitas* he (Mr. Briscoe) understood brittleness, and yet psychologists spoke of the bones in that condition as being soft. One important point was in regard to the ribs; when one talked to medical superintendents of public asylums about fractures of bones it was always the ribs which were spoken of. General paralytics seemed to break only their ribs, and no other bones in the body; but he thought if the post-mortems were made more completely it would be found that other bones also of the body were inclined to be soft and brittle. Is the tendency to fracture of the ribs in the general paralytic not possibly due to an aortitis having spread to the intercostal arteries? Very few post-mortems were made without seeing some disease of the aorta, though the aortitis was not recognised in life. He wished to ask Dr. Maule Smith if he had carefully examined the bones for evidences of mineral degeneration of the intercostal arteries. The question of the intercostal vessels close to the ribs was very important in Mr. Briscoe's opinion. There was a notable case which had been most carefully gone into by Dr. Lyman, of Chicago. It appeared in the *British Medical Journal* of October 30th, 1897. It was a case of chronic biliary obstruction, icteric necrosis of the liver cells, and chronic miliary tuberculosis of liver, spleen, and supra-renals. Dr. Lyman carefully investigated the changes and softening in the bones, and said that in true *mollities ossium* there was found at the periphery osteoid tissue, but in other forms it was not met with. The Haversian system became destroyed, and there was distinct *halisteresis*. He (Mr. Briscoe) came as a student to learn the true pathology of the condition. He had collected a large number of bones, and had shown them at this Society, and they were typical of all bone changes from osteoporosis to the worst kind of sclerosed bone. He showed, moreover, three specimens of the carinate skull of the general paralytic, and several fresh specimens of ribs. He had made chemical analyses of them, but he could not say that he came to any definite conclusion, since most of the bones were old. Again, sections of these would be of necessity unreliable. One of the difficulties one had to contend with in making sections of softened bones was the action of the acid on the part. We must not be too dogmatic as to pathological appearances unless confirmed by at least a morbid growths committee. We know the white bear at the Zoological Gardens died the other day of aneurism of the aorta, and it is of

considerable importance, for the text-books usually mention syphilis, alcoholism, and physical strain as the chief causes apart from local injury. Therefore some other cause remains to be revealed, and is this applicable to the human subject? He wished to second the thanks proposed by Dr. Jones for this interesting lantern demonstration.

Dr. MAULE SMITH, in reply, thanked the members for the very kind way in which they had received his contribution. With regard to the term *fragilitas ossium*, he had only used it in a general way to include any brittleness of bone. He did not suppose it was the same as the osteomalacia in puerperal women, though he had not had an opportunity of observing a true case of osteomalacia. As to the frequency of rib fracture in general paralysis, it must be remembered that the ribs were the slimmest bones in the body, and any change beginning in them would reach the periphery more quickly than in the case of larger bones. It was simply a matter of degree. With regard to the intercostal vessels, though he had not examined them, he had no doubt that there was atheroma such as was found in old cases elsewhere.

COUNCIL MEETING.

A meeting of the Council was held on the same day, when the following members were present:—Drs. Ernest W. White (President, in the chair); Boycott, Arthur N.; Craig, Maurice; Hill, H. Gardiner; Hyslop, Theo. B.; Jones, Robert; Legge, Richard; MacBryan, Henry C.; Macdonald, Peter W.; Mercier, Charles A.; Newington, H. Hayes; Pierce, Bedford; Rayner, Henry; Smith, R. Percy; Stewart, Rothsay C.; Taylor, Frederic R. P.; Urquhart, Alex. R.; Wigglesworth, Joseph.

The members dined together in the evening at the Café Monico.

[*Erratum*.—The General Secretary informs us that the report of Dr. Benham's election to the Parliamentary Committee, on p. 772 of the JOURNAL for October, 1903, is an error, and that the word "Educational" should be substituted for "Parliamentary."—EDITORS.]

EXTRAORDINARY GENERAL MEETING.

An Extraordinary General Meeting of the Medico-Psychological Association of Great Britain and Ireland was held at 11, Chandos Street, Cavendish Square, London, W., on Thursday, the 17th day of December, 1903, at 4 o'clock in the afternoon. The President, Dr. Ernest W. White, occupied the chair. The following members were present:—Drs. H. Rayner, Robert Jones, J. Neil, H. G. Hill, H. H. Newington, D. Bower, R. C. Stewart, R. Pugh, G. Greene, J. P. Richards, C. Mercier, H. A. Kidd, R. P. Smith, J. Whitwell, P. E. Campbell, W. L. Andriezen, T. B. Hyslop, J. F. Briscoe, R. N. Paton, H. A. Benham, T. O. Wood, F. Beach, R. J. Stilwell, A. N. Boycott, H. Stilwell, W. Kingdon, L. A. Weatherly, and W. Douglas. The subjoined resolution, which was passed at the Extraordinary Meeting of the Association held on Wednesday, the 18th day of November, 1903, was submitted for confirmation as a special resolution, on the motion of Dr. H. Hayes Newington, seconded by Dr. R. Percy Smith.

RESOLUTION:

"That the new regulations already approved by this meeting, and for the purpose of identification already subscribed by the Chairman thereof, be and the same are hereby approved, and that such regulations be and they are hereby adopted as the regulations of the Association, to the exclusion of all the existing regulations thereof."

This was passed unanimously.

At the same place and on the same day the Extraordinary General Meeting was concluded, and a further Extraordinary General Meeting of the Medico-Psychological Association of Great Britain and Ireland was held, to consider and, if thought fit, to pass a resolution to the effect "that the Bye-laws contained in the printed document submitted to the meeting, and for the purposes of identification subscribed by the Chairman thereof, be, subject to the modifications at the meeting held on the 18th day of November last, more particularly referred to

below, and the same are, subject as aforesaid, hereby approved, and that such Bye-laws, subject as aforesaid, be and they are hereby adopted as the Bye-laws of the Association."

NOTE.—The following are the modifications referred to, being those agreed at the meeting held on the 18th day of November last:

Bye-law 23 (p. 17).—The last fifteen words to run "in any locality of the United Kingdom, or in the dependencies or the colonies thereof."

Bye-law 24 (p. 17).—Read "or" for "nor" in the second line.

Bye-law 26 (p. 17).—Introduce after the word "received" in the fourteenth line "In such case it shall not be necessary for such last-mentioned member to have been recommended by six members of the Division as aforesaid."

Bye-law 56 (p. 22).—The Bye-law to commence "Any member who has spoken at an Annual, Special, Quarterly, or *Divisional Meeting*."

In Form E (last page).—Introduce a column or space on the right headed "Nominations by members voting."

In the Note at the foot of this Form.—For "General" Secretary read "Divisional" Secretary.

On the motion of Dr. David Bower, seconded by Dr. R. Percy Smith, the resolution was passed unanimously.

The proceedings then terminated.

NORTHERN AND MIDLAND DIVISION.

The Autumn Meeting of the Northern and Midland Division of the Medico-Psychological Association was held, by the courtesy of Dr. McDowall, at the Northumberland County Asylum, Morpeth, on Friday, October 9th.

There were present J. T. Callcott, Alfred W. Campbell, G. R. East, J. W. Geddes, C. Hankin, C. K. Hitchcock, Norah Kemp, G. T. May, Colin McDowall, T. W. McDowall, W. F. Menzies, James Middlemass, Alfred Miller, J. Philip, Bedford Pierce, T. G. Prosser, W. Maule Smith.

A visit was first of all paid to three detached villas recently built in an open space of ground to the east of the main block. Each of these accommodates forty male patients, under the care of an attendant and his wife and an assistant male attendant. The day rooms (in which are included a billiard room), bath rooms, lavatories, and dormitories are large and well lighted.

After lunch the company returned to one of these villas, and the business meeting of the Association was held in one of the day rooms.

Dr. T. W. McDOWALL, having been called to the chair, said that the villas which they had inspected were comparatively new to English asylums. They were worthy of attention, for they had many advantages in the treatment of certain classes of patients. The absence of locked doors, the liberty to go and come as they pleased within certain limits, were elements of freedom greatly appreciated by the patients. In all respects the administration was easy. The cost of the buildings was very small, and being away from the main block, their erection had been carried on without any inconvenience to patients in the main block, as was invariably the case when enlargements were effected, by building on the old sites. The furniture had been mainly made in the asylum, and the whole cost worked out at £135 per bed, a very moderate outlay. That sum includes cost of furnishing and clothing.

Dr. ALFRED W. CAMPBELL gave a demonstration, "Histological Studies in Cortical Localisation." He treated minutely of the results of his histological investigations in determining the extent of the motor and other areas of the brain, which he had found to correspond in position in man and in the chimpanzee. Relatively, the motor area was greater in the chimpanzee than in man. Some of his investigations strikingly confirmed the conclusions arrived at by Dr. Bevan Lewis many years ago, which at the time seemed contradictory to the results of experiment. It was now known that the localisation of the motor area

as determined by the early experiments was in some respects incorrect. The whole was illustrated by models of the human brain and that of an anthropoid ape, and by an elaborate series of drawings made from microscopic sections. A detailed account of his researches will in due time be communicated to the Royal Society.

Dr. MENZIES, in opening the discussion, asked if Dr. Campbell had found any indications that the middle of the ascending parietal and anterior half of the second parietal had any characters in common with the supposed inhibitory area,—for example, the prefrontal. He thought the point was of some importance, as that region was so constantly affected in cases of fatal softening associated with general absence of motor and mental self-control. It would also be of advantage if Dr. Campbell had been able to determine whether the tip of the prefrontal lobe, where the cells were so few, had any characters in common with the conditions seen in the developmental area,—for example, the foetal brain.

Dr. MIDDLEMASS said his two years' work as pathologist at Morningside taught him that their knowledge of the physiology of the brain was very elemental. Their great need was a fuller knowledge of the brain and its functions. Dr. Campbell's work would do much to remove the reproach that up till now so little was done by asylum medical officers. He (the speaker) had no idea that the brain was already mapped out so perfectly by Bevan Lewis as Dr. Campbell had stated.

The CHAIRMAN, in thanking Dr. Campbell in the name of the meeting for his demonstration, alluded in terms of high approbation to one he had heard Dr. Campbell give at Liverpool. With reference to the present one, he felt that it would be a great stimulus to all professional men engaged in asylum work, as well as an advance of real knowledge on a most vital point affecting humanity, if they could have the privilege of reading what Dr. Campbell had just told them, and of studying it carefully with the aid of an atlas of these elaborate and beautiful drawings. The subject had long been a favourite one with himself, for he enjoyed the privilege of assisting Dr. Ferrier at Wakefield when he carried out experiments in the same direction.

Dr. CAMPBELL, in reply, said the parietal lobe or area referred to by Dr. Menzies was one of uniform structure, but its exact function had not yet been determined. In pursuing such inquiries as he had brought before them, a point constantly present to the mind was the fact that histology was only an adjuvant to other methods of localisation.

Dr. MIDDLEMASS read a paper on the history of "A Case of Developmental General Paralysis" (see page 76), from which, and others he had dealt with, he had come to the conclusion that syphilis acquired or derived from parents was the cause of general paralysis of the insane. The patient was brought into the room, and he was carefully examined in the light of his history and condition as detailed in the paper.

The CHAIRMAN said it was long since he came to the same conclusion as Dr. Middlemass, and that in opposition to so eminent an authority as Dr. Clouston, who, however, was now of the same opinion.

Drs. Maule Smith, Pierce, and Menzies took part in the discussion which followed, and Dr. Middlemass replied.

Dr. BEDFORD PIERCE exhibited a fire-alarm box which was in use at the Retreat, and had been fitted throughout a branch house, Throxenby Hall, at Scarborough. It consisted of an automatic fire-alarm, in which was placed the exit key. On breaking the glass the alarm was given automatically, and the escape key could be at once taken out, but the key could not be obtained without giving the alarm.

Dr. NORAH KEMP read notes of a case in which thyroid treatment repeatedly produced temporary benefit (see page 78).

The CHAIRMAN thanked Miss Kemp for her clinical effort, and said that such cases were very valuable. For himself he never gave thyroid, owing to the danger of its cardiac effects.

Dr. SMITH and Dr. MIDDLEMASS stated they had found thyroid treatment beneficial in some cases, but they agreed with Dr. Kemp that the general results were very disappointing.

Dr. BEDFORD PIERCE said that he thought the case related was very striking;

that the production of acute mental disturbance by drugs was common, but the power to produce at will sanity in a chronic insane patient was noteworthy. He believed that in this case it would have been possible during the remission for the lady to have executed a will or other legal document.

Time forbade Dr. Maule Smith's demonstration with prepared specimens of unusual lesions of the brain, and the meeting closed by Dr. MIDDLEMASS moving a cordial vote of thanks to Dr. McDowall for presiding and for his hospitality.

In the evening the members dined at the Station Hotel, Newcastle.

SOUTH-EASTERN DIVISION.

The Autumn Meeting of the South-Eastern Division was held by the courtesy of Dr. Rawes at St. Luke's Hospital, E.C., on Thursday, October 29th, 1903.

Among those present were Drs. Ernest White (President), D. Hunter, Edridge-Green, Haynes, Amsden, Moody, F. H. Pearce, Macevoy, Peeke Richards, Gayton, Chambers, Campbell Thomson, Elkins, Elgee, D. Ogilvy, Murphy, Steen, Stilwell, Stoddart, Haslett, Hopkins, W. H. Bailey, Taylor, Shuttleworth, T. O. Wood, Elliot, Alliot, Sibley, H. W. Lewis, Johnston, Higginson, Patterson, D. G. Thomson, Lavers, F. H. Edwards, Fee, H. Stilwell, Bower, P. Langdon Down, Douglas, Aldridge, Rawes, and Boycott (Hon. Sec.).

After luncheon a meeting of the Divisional Committee was held, and the hospital was inspected.

The General Meeting of the Division was held in the afternoon, Dr. Ernest White (President) in the Chair.

The minutes of the last meeting, having already appeared in the JOURNAL, were taken as read and were confirmed.

An invitation from Dr. Hunter to hold the Spring Meeting of the Division at the West Ham Borough Asylum in April, 1904, was unanimously accepted with much pleasure.

The following gentlemen were elected ordinary members of the Association:—Langton Fuller Hanbury, M.R.C.S.Eng., L.R.C.P.Lond., Assistant Medical Officer, West Ham Borough Asylum (proposed by Drs. Hunter, W. R. Hanbury, and Boycott); Frank Raymond King, B.A.Cantab., M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent, Northumberland House (proposed by Drs. Halsted, Rawes, and Boycott); John Arthur Topham, B.A.Cantab., M.R.C.S.Eng., L.R.C.P.Lond., Assistant Medical Officer, Northumberland House (proposed by Drs. Halsted, Rawes, and Boycott).

AS TO ELECTION OF DIVISIONAL SECRETARY AND REPRESENTATIVE MEMBERS OF DIVISION ON COUNCIL.

This item appeared on the agenda as follows:—"To consider the best means of making nominations for the election of the Divisional Secretary and Representative Members of the Division on the Council."

Dr. BOYCOTT (Hon. Secretary) said that the new rules, as he understood from the General Secretary, would come before the Association at the next two meetings. If they were confirmed—and they would probably be confirmed before Christmas—he supposed they would come into force next July, so that the Division would probably find itself in the position of having to appoint four divisional representative members of the South-eastern Division on the Council next July. Also, in the new rules there was a clause to the effect that those representative members must be voted for on voting papers. In order to carry that out the selected members would have to be nominated and their papers signed by six members of the Division within a certain time before the April meeting of the Division, so that they could be sent round on voting papers. He thought that the meeting should consider what the Division should do if it were necessary to nominate for voting at the ensuing April meeting.

Dr. AMSDEN said the Committee of the Division met and considered the subject, and unanimously came to the conclusion that it would be desirable to empower

the Secretary to call a special meeting of the Committee, prior to the meeting alluded to in April, for the purpose of discussing the matter and suggesting names.

Dr. AMSDEN then proposed, Dr. BOWER seconded, and it was unanimously resolved that the Hon. Divisional Secretary should have authority to convene a special meeting of the Divisional Committee at some convenient place before next April.

Dr. BOYCOTT said that when the new rules came into force, and members knew where they stood in the matter, the routine procedure would have to be decided. The present provision was for a temporary situation.

Dr. STEEN exhibited and demonstrated an "ideal inhaler." He said he thought a good inhaler was required in asylums. Gas was very expensive, and when a tooth required to be drawn the patients objected to it being done without an anæsthetic. The new anæsthetic used in the present apparatus was somnoform, consisting of ethyl chloride 60 per cent., methyl chloride 35 per cent., ethyl bromide 5 per cent. The inhaler was made by the Dental Manufacturing Company. He believed that somnoform was much more satisfactory than gas. It had been given 75,000 times without accident, and it was pleasant to the patient. He had only given it twenty-five times himself, but he had found it very good.

Dr. RAWES read a paper entitled "A Short History of St. Luke's Hospital" (see page 37).

Dr. EDRIDGE-GREEN opened a discussion on "The Relation of Hysteria to Insanity." (This paper will appear in the April number of the JOURNAL.)

After the discussion on the papers—

The PRESIDENT proposed a vote of thanks to Dr. Rawes for the kind manner in which he had placed St. Luke's Hospital at the disposal of the Division for that meeting, and for the way he had contributed to the interest of the members.

Dr. RICHARDS seconded the motion, which was carried by acclamation and duly acknowledged.

After a vote of thanks to the President for presiding in the chair the meeting terminated.

The members dined together subsequently at the Café Monico.

SOUTH-WESTERN DIVISION.

A meeting of the South-western Division was held at the County Asylum, Wotton, Gloucester, on November 3rd.

Dr. Craddock was voted to the chair, and the following were present:—Drs. Woods, Benham, Bullen, Rorie, Laval, Stewart, Kough, Smyth, Soutar, Miller, Aldridge, Braine-Hartnell, Aveline, MacBryan, Marnan, Henley, Bubb, MacDonald (Hon. Secretary).

Letters of apology for inability to be present were received from Drs. Brayn, Davis, Stewart, and Weatherly.

The minutes of the last meeting were read and confirmed, and Ed. Fitzadam Kough, M.B., B.Ch., T.C.D., A.M.O., County Asylum, Gloucester, was elected an ordinary member of the Association.

A letter was read from Dr. Brayn inviting the Association to hold their April meeting at Broadmoor Asylum, and, on the motion of Dr. STEWART, seconded by Dr. BULLEN, the invitation was accepted unanimously.

COMMUNICATIONS.

Dr. RORIE read a paper entitled "Notes on Adolescent Insanity." (This paper will appear in the April number of the JOURNAL.)

Dr. MARNAN read a paper entitled "Some Remarks on the Use of Caution Cards in Asylums." (This paper will appear in the April number of the JOURNAL.)

Dr. MacDonald's paper was postponed to a future meeting.

A vote of thanks to Dr. Craddock for his hospitality concluded the proceedings.

The members and friends subsequently dined at the Club, Gloucester.

IRISH DIVISION.

SPECIAL MEETING.

A Special Meeting of this Division was held at 41, Upper Fitzwilliam Street, Dublin, on Monday, October 5th, 1903. Dr. M. J. Nolan occupied the chair, and there were also present Drs. C. Norman, B. C. Harvey, H. M. Eustace, and W. R. Dawson (Hon. Sec.). Letters regretting inability to attend were notified from Drs. J. Mills, J. Oakshott, and R. R. Leeper.

The minutes of the previous meeting were slightly amended and signed.

YOUGHAL AUXILIARY ASYLUM.

The HON. SECRETARY stated that the meeting had been called with reference to the impending arrangements for the management of Youghal Auxiliary Asylum, and read portions of two letters from Dr. Oscar Woods, and a leading article from the 'Cork Constitution,' explaining the circumstances. In 1901 the Committee of the Cork Asylum, deciding to take advantage of the 76th section of the Local Government (Ireland) Act, obtained the sanction of the Lord Lieutenant to making the Youghal Auxiliary part of the parent asylum. In the August of the present year, the asylum approaching completion, it was decided to appoint some nuns as officials, and also to have no resident medical officer, but a visiting physician at a salary of £100. The matter was then before the Lord Lieutenant for his approval, and Dr. Woods had suggested that a copy of the first clause of the resolution bearing on the subject which was passed at the Annual General Meeting of the Association at Cork in 1901 should be forwarded to His Excellency through the Inspectors of Lunatics, and reinforced by a further resolution from the Division.

After a prolonged discussion, in which all present joined, it was decided to fall in with Dr. Woods's suggestion as regards the copy of the first clause of the Cork resolution, and to send with it a covering letter expressing the opinion that an institution to contain some 400 insane, like that at Youghal, could not safely be managed without a resident medical officer, and that such an officer could be secured for the same salary that it was proposed to offer to the visiting physician, a post which had long been discarded as obsolete.

The Secretary was also directed to forward to the Inspectors, with a letter strongly expressing the opinion of the meeting, a resolution urging them to use all their influence to check such a tendency to retrograde and obsolete methods.

The proceedings then terminated.

AUTUMN MEETING.

The autumn meeting of the Division was, by the kind invitation of Dr. Leeper, held at St. Patrick's Hospital, James's Street, Dublin, on Friday, November 13th, 1903.

Before the meeting the members, some of whom had previously inspected the institution, were entertained at luncheon by Dr. Leeper.

There were present Dr. Leeper, who occupied the chair, and also Drs. G. R. Lawless, W. Kelley-Patterson, M. J. Nolan, J. Mills, C. Norman, T. Drapes, J. A. Oakshott, and W. R. Dawson (Hon. Sec.). A letter regretting inability to attend was notified from Dr. Oscar Woods, and a telegram from Dr. J. J. Fitzgerald.

The minutes of the previous meeting were read, confirmed, and signed.

CORRESPONDENCE CONCERNING YOUGHAL ASYLUM.

As matter arising out of the minutes, the Secretary reported that, in accordance with the instructions given at the last meeting, he had written two letters to the Inspectors, which had been acknowledged. The Cork Committee had reaffirmed their decision, but the Lord Lieutenant was still considering the matter. The letters were read, and were directed to be entered on the minutes.

It was proposed by Dr. NORMAN, seconded by Dr. LAWLESS, and carried unanimously—"That the Secretary be empowered to call a special meeting of the Division in case any matter he deems of sufficient importance arises, before our next regular meeting, in connection with the Youghal Asylum scheme."

ELECTION OF ORDINARY MEMBERS.

The following candidates were elected ordinary members of the Association :

PATRICK HEFFERNAN, B.A., M.B., B.Ch., B.A.O., R.U.I., Assistant Medical Officer, District Asylum, Clonmel (proposed by Drs. Bagenal C. Harvey, H. T. Bewley, and W. R. Dawson).

ALEXIS FITZGERALD, L.R.C.P.I., L.R.C.S.I., L.M., Assistant Medical Officer, District Asylum, Waterford (proposed by Drs. J. A. Oakshott, Oscar Woods, and W. R. Dawson).

DATE AND PLACE OF NEXT MEETING.

The date and place of the next Divisional Meeting were discussed, and it was decided to hold it in Dublin about next Easter.

REVISED ARTICLES OF ASSOCIATION AND BYE-LAWS.

The SECRETARY said that the draft revised bye-laws, a copy of which had been received by each member since the notices of the meeting had been sent out, provided for the nomination of the Divisional Secretaries and representative members of Council, so that further consideration of this matter was unnecessary at present. He wished, however, to call attention to the provision in draft Bye-laws XXVII and LXXXVII, that the dates of the divisional meetings should be fixed at the Annual General Meeting, and that no alteration could be made within two months preceding each meeting. He thought this unworkable.

After a short discussion it was proposed by Dr. NORMAN, seconded by Dr. NOLAN, and carried unanimously—"That in the opinion of this meeting it would be highly inconvenient to fix the dates of the divisional meetings at the Annual Meeting, and that therefore the clauses dealing with this point in the proposed bye-laws should be omitted."

REPORTS OF MEETINGS.

Dr. NOLAN said that he thought that it would be desirable for the reports of the meetings, more especially the general meetings, of the Association to be available earlier than was allowed by the date of their publication in the JOURNAL. The Secretary undertook to send a report of the divisional meetings to the *British Medical Journal*, and to inquire regarding the general meetings.

COMMUNICATIONS.

1. Dr. LEEPER read the following short paper, entitled "Notes on St. Patrick's Hospital."

My first duty to-day is to welcome you to this old hospital, and to hope that your visit may be repeated as often as the Irish Division of the Association may desire. The work and history of this parent of Irish asylums is too familiar to you, and needs little of detailed and tedious description from me to-day.

Our work has been gradually growing, and I am pleased to think our curative ability has been yearly increasing. Our annual recovery rate has been to me satisfactory. It is, I feel, the best that can be got out of the material sent to us, and is in a direct proportion to the amount that can possibly be done with the

present known means of favourably influencing the course of mental disease. I can gather that the more experienced amongst us regard with suspicion an unduly high recovery rate in an asylum, seeing that this varies so considerably in different institutions, and sometimes seems to admit of somewhat startling statistical oscillations, which may not always be justified by the after conduct of its component units, who have helped to swell the ever to be desired number of annual recoveries. I can assure you, however, that much good and useful work is yearly accomplished here, and, but for the generally felt curse of the frequent hereditary causation of insanity, is as satisfactory as one could desire from the most modernly constructed of mental hospitals.

The desire of the great dean who founded this hospital was to have it so constructed as to allow of its extension as occasion might require, and by means of the comparatively recent acquisition of the Manor of St. Edmundsbury at Lucan, we are now provided with a more effective and economically curative machinery. We are enabled by means of our farm and gardens to supply ourselves entirely with milk, meat, and vegetables, which come in daily to us from Lucan, and our institution is now almost entirely self-fed.

For some years past nearly the whole of our entire income has been expended upon structural alterations and improvements, and although those of you who have visited the wards to-day may have found things not as modern and as up-to-date as you are accustomed to, yet it is well to remind you that we are of so old a foundation that the same interest which has brought you here to-day, an interest in the betterment of the lot of the insane, brought the great philanthropist John Howard, who died in 1790, here a century and a half ago, and that you have trod to-day in the footsteps of him who visited us animated by the same sympathetic interest in our work.

Our hospital is still carrying on its work, and though grown old in years, it has been rendered with great expense and difficulty ever fit for its humane purpose.

I can but briefly touch upon the early history of this place, and shall say nothing of the many great men who have been from time to time connected with its work and development. There can be no doubt that it was built upon the model of Bethlem Hospital, and that Swift was well acquainted with the hospital in Moorfields, either from personal inspection or from the pictures of Hogarth. It may not be uninteresting to draw your attention to the minute knowledge which Swift possessed of the behaviour and conduct of insane persons as shown by his writings. In that witheringly sarcastic poem "The Legion Club," wherein he likens the then corrupted obnoxious members of the Irish Parliament to so many lunatics in an asylum, he shows how minute had been his knowledge of the construction of asylums, and of the peculiarities and degraded habits of the insane persons of his time. In this poem he describes the section of the Members of Parliament as so many lunatics in a madhouse, and reviews them as one making an inspection of the patients of an asylum.

"Yet should Swift endow the schools
For his lunatics and fools
With a rood or two of land,
I allow the pile may stand.
You perhaps will ask me why so?
But it is with this proviso:
Since the house is like to last,
Let a Royal grant be passed,
That the "club" have right to dwell
Each within his proper cell,
With a passage left to creep in,
And a hole above for peeping.
Let them, when they once get in,
Sell the nation for a pin;
While they sit a-picking straws
Let them rave of making laws;
While they never hold their tongue
Let them dabble in their dung.
Let them form a grand committee,
How to plague and starve the city.

How I want thee, humorous Hogarth !
 Thou, I hear, a pleasant rogue art ;
 Were but you and I acquainted
 Every monster would be painted.
 Draw the beasts as I describe them
 From their features, whilst I gibe them ;
 Draw them like, for I assure you
 You will need no caricatura ;
 Draw them so that we can trace
 All the soul in every face."

What a wholesome terror to evil-doing politicians would an attack of this description be ! Can we imagine the feelings of a public man living under the dread of the biting lash of Swift's sarcasm, combined with the fear of being sent down to ages by the pencil of Hogarth, those scathing satirists of the vices and follies of the days in which they both lived, and the evils which they by different means so mercilessly and savagely scarified ?

This hospital was designed, as I have said, so that it could always be added to, and, as Swift predicted, if it extended from where you sit to the Phoenix Park, there would always be more applicants than there would be room for. I shall, in conclusion, show you the minutes of the first meeting of an Irish Asylum Board held in 1746, and the record of work done in the public service before Ireland could boast of a criminal asylum, together with some old curiosities connected with the bygone treatment of insanity.

2. Dr. NOLAN exhibited a number of interesting naked-eye and microscopic specimens, and gave particulars of the cases from which they were taken (see page 69).

Dr. DAWSON was inclined to think, from the single microscopic specimen which he had examined, that the tumour in the second case was not really a fibroma, but what the Germans called an endothelioma.

3. Dr. CONOLLY NORMAN made a communication entitled "Gossip about Gheel" (see page 53).

4. Dr. LEEPER read the following note on "A New Method of fixing the Brain and Cord for Examination :"

The method I have to bring before your notice is one which I recently saw employed by the eminent neurologist, Dr. Marie, of Paris. Six months ago I examined, by a modification of the Nissl method I commonly use, the brain of a sane man who was accidentally killed by a fall. The examination of this normal brain was of much interest to me, as it showed fine chromatolytic changes such as have been described as occurring in the brains of the acutely insane. These changes occurring in a normal brain were undoubtedly due to failure in fixation and post-mortem change, and had they been observed in the brain of an acute case of mania or melancholia would undoubtedly be described as pathological. Dr. Marie kindly demonstrated to me this method of fixation, which is so simple, ingenious, and effective, that I think it worthy to bring before your notice. His method is as follows :—As speedily as possible after death a hollow needle is passed beneath the eyeball through the "foramen lacerum anterius" into the cranial cavity. It is necessary to see that the needle is not hitched against the bone, but is free and long enough to penetrate the subdural space. To this needle is attached a piece of rubber tube (a small-sized nasal feeding-tube I find very handy), and a solution of formalin (200 grammes of a 10 *per cent.* solution) is allowed to flow into the cranial cavity. If the head is slightly raised the solution flows down very quickly, and fixes and partially hardens the brain and cord in a wonderfully rapid and satisfactory manner. Here we have a way of fixing tissue of great use, and by it we are able to eliminate cadaveric artefacts, which would otherwise appear to be impossible. The brain is subsequently, of course, removed as speedily as possible, when Müller or other hardening fluid may be used to fix the tissue for sectioning, just as if the fixation by means of formalin had not been previously done. I exhibit a brain and cord which have been treated in this way and also three slides. No. 1 is the normal brain, which was fixed in the usual way. It shows slight cadaveric changes which have occurred as the result of want of rapid fixation.

No. 2 is a section of grey matter in frontal region in an old lady who was fifty

years an inmate of the hospital. There are extensive chromatolytic changes seen, but we can see that the outlines of nerve-cells are wonderfully preserved, and that almost all the cells existing have been stained well and present a rather respectable appearance considering three years of wear and tear.

No. 3 is a section of the brain of an aged paranoiac who died from apoplexy. In this section extensive degenerative change is of course seen, and can be contrasted with No. 2. Nos. 2 and 3, being from similar brains, in which one would expect to find similar pathological degenerative changes, have been fixed—the one by the new and the other by the old method.

Dr. DAWSON thought the method would prove a very valuable one, as the great difficulty in brain work was to get the specimens sufficiently fresh. He wished to know whether the internal structures were satisfactorily fixed by the method, or whether it was mainly useful for the cortex.

Dr. LEEPER replied that the deeper parts were not very satisfactorily fixed by it. It facilitated the removal of the brain and cord without laceration.

The proceedings then terminated.

SCOTTISH DIVISION.

A meeting of the Scottish Division of the Medico-Psychological Association was held within the Hall of the Royal College of Physicians, Queen Street, Edinburgh, on Friday, November 27th, 1903.

The following members were present:—Drs. Bond, Campbell, Carlyle Johnstone, Easterbrook, Ford Robertson, Havelock, Hayes Newington, Hyslop, Keay, Kerr, Marr, Macdonald, Oswald, Parker, Ronaldson, G. M. Robertson, Turnbull, Thomson, Urquhart, Yellowlees, L. C. Bruce, Divisional Secretary, Mr. Scott, of Synton, and others.

Letters of apology were intimated from Drs. Ernest White, Clouston, Ireland, and Watson. Dr. Hayes Newington was called to the chair. The minutes of the last meeting were read, approved of, and signed.

The SECRETARY read the report of the Retiring Allowances Committee as follows:—The Retiring Allowances Committee beg to report that fifty-seven members of Parliament for Scotland out of seventy-two have been approached on the subject of pensions for workers in the district and parochial asylums of Scotland. Thirty-nine of these members have replied, promising support or expressing sympathy.

The following question was put and answered in Parliament on July 13th, 1903:—Sir James Fergusson,—To ask the Lord Advocate, considering that no statutory provision exists in Scotland for the grant of superannuation allowances to officers and servants of district and parochial lunatic asylums, while such provision has been made in respect of county and borough asylums in England, of district asylums in Ireland, and of chartered asylums in Scotland, as well as in other departments of the public service, and that the General Board of Commissioners in Lunacy in Scotland have repeatedly in their reports pointed out that the absence of such provision is prejudicial to the interests of patients in the asylums, the Secretary of Scotland will consider the propriety of introducing a measure to place Scottish public asylum officials on a footing similar to those in English, Irish, and chartered Scottish asylums.

Answered by Mr. Graham Murray.—The point will be considered, in the event of its being found possible and expedient, to propose legislation for the amendment of the Lunacy (Scotland) Acts, but the Secretary for Scotland is unable to come under any definite obligation on the subject at present.

Sir James Fergusson has also kindly offered to take charge of a bill in the House of Commons for the amendment of the Scottish Lunacy Acts in respect to the granting of superannuation allowances to the officers and servants in Scottish district and parochial asylums. Excluding the Royal Asylum officials, we find that the officials in Scottish district and parochial asylums number over 1400, and that the householders number over 318.

It has been decided by the Sheriff Principal of Perthshire at Dunkeld that an

attendant does not require to be a householder to be on the register of voters. If the superintendent of the asylum does not reside in the institution itself, then every attendant who has a room to himself is entitled to a vote.

Owing to the recent change in the post of Secretary for Scotland, and to the delay which has been experienced in procuring returns from certain asylums, the committee have made no direct representation to Mr. Graham Murray, but they propose that a deputation of the Scottish Division of the Medico-Psychological Association should now approach the Secretary for Scotland.

Signed: A. R. URQUHART,
J. CARLYLE JOHNSTONE,
LEWIS. C. BRUCE.

Dr. CARLYLE JOHNSTONE moved the adoption of the report, and Dr. Easterbrook seconded.

The motion was carried unanimously.

With regard to the proposed deputation to place the pension claims of workers in Scottish district and parochial asylums before the Secretary for Scotland, Dr. OSWALD moved, and Dr. YELLOWLEES seconded—"That the Committee have the power, in case of accident, to settle who is to speak, but that Dr. Clouston be asked to introduce the deputation, and that Dr. Urquhart be asked to make any further remarks if necessary; and if further remarks are required, that Dr. Carlyle Johnstone be asked, and failing him, Dr. Bruce, to make those remarks."

The motion was carried unanimously.

ELECTION OF MEMBER.

Sidney John Cullum, M.B., Ch.B.(Univ. Dublin), Assistant Physician, District Asylum, Inverness (proposed by Drs. Keay, Easterbrook, and Bruce), was elected an Ordinary Member of the Association.

Dr. BRUCE read a paper by Dr. CLOUSTON on "The Prodromata of the Psychoses," which was discussed by Drs. Hayes Newington, Yellowlees, Hyslop, Urquhart, Marr, and Bruce.

Dr. BRUCE read clinical notes (1) on a Case of Acute Mania bearing upon the effect of Acute Intercurrent Disease as it affects the Mental State; (2) on the Experimental Use of Antiserums in Acute Insanity; which were discussed by Drs. Hayes Newington and Ford Robertson. (These papers will appear in the next number of the JOURNAL.)

A vote of thanks to Dr. Hayes Newington for his conduct in the chair terminated the meeting.

The members afterwards dined together in the Palace Hotel.

RECENT MEDICO-LEGAL CASES.

REPORTED BY DR. MERCIER.

[The Editors request that members will oblige by sending full newspaper reports of all cases of interest as published by the local press at the time of the assizes.]

Hutchinson v. Walsh and another.

Plaintiff sued Dr. Walsh, his brother-in-law, and Dr. Meehan for damages for assault and wrongful imprisonment. There was a further plea that the defendants by false representations had induced the father of the plaintiff to make a will less favourable to the plaintiff than he otherwise would have done, but this was abandoned.

On the 28th February, 1901, Dr. Walsh, believing that plaintiff exhibited signs of dangerous maniacal excitement, tied him up with harness reins, and sent for Dr. Meehan, the second defendant, to examine the patient. The plaintiff's father meanwhile consulted Father Kavanagh, who recommended that the lad should

be sent to the Home of St. John of God, at Stillorgan, and offered to take him there. Dr. Meehan, being told this by the father, did not examine the plaintiff, but on the hearsay he wrote a document which was variously called "an opinion" and "a certificate," but which was not a certificate in the form required by law in a case of insanity. It stated, *inter alia*, that the plaintiff was "a fit case at present to be placed under restraint." With this document the plaintiff was taken to the Home of St. John of God, an institution apparently of the nature of a registered hospital for the insane, situated at Stillorgan. It is administered, and apparently owned by a religious body, the Brothers of St. John of God, who are, we believe, chiefly Frenchmen, but who must be assumed to know the law of the country in which they are resident, since they have been established in it for some twenty years at least.

This law provides that, for the admission of a patient into such an institution as the Home of St. John of God, the following documents are necessary :

1. An order by a relative or connection of the patient.
2. A medical certificate in a certain prescribed form signed by two medical practitioners.

Or in cases of urgency the signature of a single practitioner is sufficient, provided that a second is added within fourteen days of the first.

Now young Hutchinson arrived at the House of St. John of God unprovided with a proper certificate. The "opinion" of Dr. Meehan was not in the prescribed form required by the law, and Dr. Meehan stated in the witness-box that he knew the prescribed form, and knew that his "opinion" did not conform with it, but he did not know that the Home of St. John of God was a lunatic asylum. He had not examined or seen the patient before giving the "opinion." Under these circumstances what were the Reverend Brothers to do? They had this young gentleman delivered at their House, but they had no legal authority to detain him, and copies of the documents on which he was detained must by law be sent to the Lunacy Inspectors, who occupy the position held in England and Scotland by the Lunacy Commissioners. Their course was clear. A certificate was necessary: they had no certificate. So a certificate was made purporting to be a copy of Dr. Meehan's, but it was made in the prescribed form, so that it might pass muster at the Castle. This certificate, being in proper form, was accepted by the Inspectors.

The certificate was, it was stated, made by Brother Finbar, one of the community. The evidence of Dr. O'Connell, the Medical Officer, is peculiar. Asked if he did not know that it was his duty to transmit a true copy of Dr. Meehan's paper, he said that it was not, for that he was not the medical superintendent but the resident physician, and had nothing to do with the returns. Asked how long this practice had been going on, he answered, "I do not know; I have seen it a few times." Subsequently he admitted that certificates were often made up in this way. The letters that were written about the patient while in the asylum were burnt; he could not tell when they were burnt, but it might have been this year. He did not think that he had heard that there would be litigation when he burnt the letters.

In summing up, the Lord Chief Baron said that there was no doubt that the plaintiff was illegally imprisoned, and that he was kept in St. John of God's at a time when, according to the evidence, he was sane; and that he was so kept without the course being pursued which by law would have authorised his detention. This wrongful imprisonment was the act of those who represented St. John of God's, and was not the act of any other person in point of law. He felt bound to say that Dr. Meehan, who knew the lunacy laws, had violated these laws in the certificate which he furnished for the purpose of having the unfortunate plaintiff subjected to restraint or supervision, which was probably the same thing. Dr. Meehan did not examine the plaintiff, but without examination gave a general statement of his opinion, a thing no medical man ought to be persuaded to give, even if it was, to use Dr. Meehan's own language, "going as far as I could." The jury found, by the judge's direction, for both the defendants.

We understand that since this trial an action has been entered for a new trial.

Christie and others v. Simpson and others.

An action to set aside the testamentary disposition of the late John Christie, who died August 19th, 1902, aged 78, leaving large property and two wills, dated respectively 30th December, 1897, and 12th December, 1901. The plaintiffs, daughters and only surviving children of the testator, sought to set aside the wills on the ground that the testator was not at the time of executing them of sound disposing mind.

The testator was a very wealthy man, and made many wills. In the earliest will, of 1874, he divided his whole property among his wife and children. In the next, of 1887, he left his large landed estates in the same way, and made provision for his grandchildren; and as to the rest of the estate, one half was distributed in the same way, while the rest went to establish and maintain an orphanage. In 1887 (it does not appear whether before or after the will of that year was made) he had a very severe illness, after which his temper, his disposition, and his habits of life completely altered, and he became subject to definite delusions of suspicion, imagining that his daughters spied upon him. By his will of 1890 he cut down the provision to his wife and children to £300 a year each (he was then living at the rate of £20,000 a year, and could well afford it), and everything else went to the orphanage. In his will of 1893 the £300 is increased to £400 each to the wife and children, but otherwise the will is unchanged. In 1897 and 1901 the £400 is reduced again to £300, and the residue as before.

The illness from which the testator suffered in 1887 was pernicious anæmia, and it was very severe. It lasted for eight months, and for forty-eight hours he was comatose, and was only kept alive by artificial respiration. After this illness, as has been said, his temper, disposition, and habits of life completely altered, and he exhibited definite signs of mental alienation. Previously he had lived the life of a hospitable and cultured country gentleman; he was fond of society, devoted to his wife and children, proud of his estate and of his fine collections of pictures, china, and old silver, to which he was constantly adding. After his illness he shunned society and lived in seclusion. He became secretive, and instead of, as formerly, taking his wife and children freely into his confidence, he would start off on journeys without giving them notice; he kept everything under lock and key; he complained, without a shadow of justification, that his daughters were spying upon him, were his enemies, were combined against him, etc. He became for the first time liable to fits of ungovernable temper, and he became extremely penurious, being under the delusion that his lands were lost, although his actual income was between £23,000 and £25,000.

In 1893 he had a recurrence of his illness. In this year his wife died, and he received the news with indifference amounting to callousness, and refused to pay for her coffin. About this time he secretly established his home for orphans, keeping all knowledge of it sedulously from his family. He engaged a matron for this home, and at the third interview that he had with her he proposed marriage to her. The most remarkable freak that he exhibited was with regard to his splendid collections. He had a large strong-room built in the orphanage, and to this he removed secretly and by degrees his collections of gold and silver plate, his rare and expensive china, and so forth, until in his country seat there were no spoons or forks left to use. And much of the plate which he thus removed and gave to the orphanage was family plate in which he had a life interest only. He removed this in a bag from his country to his town house, and then again secretly from his town house to the orphanage. Some of these assertions were traversed by the defence, but practically they were established.

In the event the jury were not called upon to deliver a verdict, the case being settled upon terms, amongst which the restoration to the daughters of the testator of all the furniture, pictures, china, silver curios, etc., was included. It may therefore be concluded that the unsoundness of the testator's mind was practically admitted, although the last will was allowed to stand.

The case is unique in respect that the admitted unsoundness of mind which the testator exhibited was the sequence, and it cannot be doubted the consequence, of the attack of pernicious anæmia from which he suffered. Much was made on the side of the defence of the fact that in ordinary business relations the mind of the

testator was acute, capacious, and successful at the time when he was said to be of unsound and non-disposing mind. The readers of this JOURNAL do not need to be reminded that the soundness of mind in business matters may co-exist with unsoundness of mind in the family relations. That question was settled once for all by the Gilbert Scott case, and is no longer in doubt, even in a court of law.

YOUGHAL AGAIN.

The Auxiliary Asylum at Youghal has already occupied some of the attention of our readers. From the *Cork Examiner* of December 9th we learn that it was the cause of a lively debate at the Cork Asylum Committee Meeting on the day before. The question at issue was the appointment of a visiting physician to the Youghal Auxiliary. There was a little long-range firing between bishops of various denominations as to the "arrangement" by which the Auxiliary is reserved for Roman Catholics only; but the worst "shindy" that arose was over an advertisement. It appears that by an obvious error the advertisement for a Visiting Physician said that that officer was to have a salary of £100 a year "with emoluments," instead of "without emoluments," which was what the Committee had ordered. Attention was called to this, and threats of sworn inquiries and charges of misrepresentation and cooking public documents were forthwith hurled about with that desire to subordinate business to mere exasperation, that lack of dignity and responsibility, which make the stranger doubt whether even the cleverest Irishmen are capable of taking themselves quite seriously. Browbeating innocent and hard-worked officials is a form of sport so safe and so easy that it can have little to commend it save the mere fact that it may produce pain. It can hardly add to the consequence of any one in Ireland at present. When the scrimmage was over Dr. Michael Twomey was appointed Visiting Physician to the Youghal Auxiliary Asylum. The proceedings recall Byron's account of how King George III got into heaven:

"And when the tumult dwindled to a calm
I left him practising the hundredth Psalm."

By-the-bye, at the same meeting the arrangements for a resident chaplain were made. This gentleman is to have the same salary as the physician, namely, £100 a year, but with emoluments, including an edifice known as "the doctor's house," we presume originally intended for a resident physician.

Medical Psychological Assoc.
NOTICES BY THE REGISTRAR.

EXAMINATION FOR THE NURSING CERTIFICATE.

The following is a list of successful candidates at the examination in November, 1903:

Cumberland and Westmorland.—Male: John Cumming. Female: Maude Alice Wilkinson.

Derby County.—Male: William James Webb.

Durham County.—Females: Louisa Stanley, Florence Walmsley, Rosina V. E. Chambers, Edith Mary Dent, Lily Simpson, Amy Beardmore.

Essex County.—Females: Mabel Elizabeth Fish, Florence Julia Spinks, Lydia M. Stainer, Agnes Smith, May Dorcas Chicken, Alice Marion Nelson.

Bexley.—Males: George Taylor, George Joseph Richards Phillips, John Hennessey. Females: Daisy Eliza Newell, Eliza Beckham, Kate Walkling, Jane Agnes Doyle, Lucy Annie Lowe, Alice Kaye, Martha Kennedy, Elsie Webb, Hilda Lilian Giles.

Salop County.—Male: Henry Wakefield Evans. Female: Margaret Hamilton.

Somerset and Bath.—Males: Henry Snow, Jacob Benjamin Robbins, Albert E.

Butcher, William Hy. Crook, William George Dean. Females: Jane Barnett Shepherd, Mabel H. Fisher, Nellie Heard.

Three Counties, Hitchin.—Male: Evan Adams.

Warwick County.—Females: Annie Emma Hawkins, Emily Jane Green, Ellen Doak.

Birmingham City, Winson Green.—Females: Minnie May Ward, Hannah Elizabeth Baker, Louisa Hunt, Lizzie Wagg.

Birmingham City, Rubery Hill.—Mary Ann Evans.

Bristol City.—Males: Edmund Quigley, John Hamblin. Females: Ada S. Maylett, Ellen M. Dekin.

Caterham.—Male: Alfred William Quaintance. Females: Mira Ellen Pickett, Agnes May White Tallack, Annie Wallace.

Parkside.—Males: James Taylor, Walter Garside, Richard Porter, Joseph Storer, Arthur Beardmore, Robert Mason, Fred Heath, William Worthington, Frank Wadsworth, Frederick Duffield. Females: Hannah Armit, Susan Barnes, Nellie Stagg.

Retreat, York.—Male: George Fryer. Females: Maria B. E. Hardwicke, Annie Blanche Land, Ethel Mary Davis.

SCOTLAND.

Argyle and Bute.—Females: Mary Williamson Wilson, Kate Brodie Craig.

Gartloch.—Female: Catherine Cameron.

Inverness District.—Female: Isabella Mary Lamont.

Stirling District.—Male: Richard Rennie. Females: Helen White, Margarita Jane Mainland.

Riccartbar.—Male: John Smith. Females: Isabella Garden, Margaret Campbell.

IRELAND.

Stewart Institution.—Female: Elizabeth Byrne.

Down District.—Males: William E. Watson, Patrick Burns, Robert King, Alexander McDonald, James Cavan, Charles Morrison, Samuel Kennedy. Females: Catherine E. Smith, Sarah Magee, Nora Cunningham.

Londonderry District.—Male: William Bradley. Females: Margaret McGuinness, Cecilia Collins, Roseanna O'Hara.

The following is a list of the questions which appeared in the paper.

1. Describe the Spinal Cord. Where is it situated? What are its functions?
2. What are the organs of Excretion? State how the body gets rid of its various waste matters.
3. What is Hernia? What precautions should be taken in dealing with a case of Hernia?
4. State the ordinary (a) physical and (b) mental signs and symptoms of General Paralysis of the Insane. To what special risks are General Paralytics liable, and what precautions should you observe?
5. What are the more common methods of attempting Suicide? How would you endeavour to counteract the tendency on the part of your patient? How would you act if you found a patient hanging by the neck?
6. State fully (a) what class of patients are most liable to bedsores. (b) What would you do to prevent this occurrence? (c) What treatment would you adopt when they are found to exist?
7. To what bones is the thigh-bone attached, and by what kinds of joints? What part of the thigh-bone is most often broken?
8. How would you render first aid to cases of—
 - (a) Fainting.
 - (b) Bleeding from a Varicose Vein in the leg.
 - (c) Choking at dinner.

9. Make a list of the faulty habits most common in the insane. Take one of these habits, and describe how you would try to cure it.

10. What are the differences between Idiocy, Imbecility, and Dementia?

EXAMINATION FOR NURSING CERTIFICATE.

The next examination will be held on May 2nd, 1904.

EXAMINATION FOR THE PROFESSIONAL CERTIFICATE.

The next examination for the Certificate in Psychological Medicine will be held in July, 1904. Information regarding the examinations can be obtained by applying to the Registrar, Dr. Alfred Miller, Halton Asylum, Warwick.

ANNUAL MEETING.

The change of date of last year's meeting unfortunately led to the absence of W. M. Edwards, M.D., who had been appointed as delegate from the American Medico-Psychological Association.

KING'S COLLEGE HOSPITAL.

In connection with the movement now going on for the transfer of hospitals and asylums from the City to the suburbs, it is of interest to note that our President, Dr. Ernest W. White, has been elected a member of the Joint Committee and Building Committee of the new King's College Hospital.

NOTICES OF MEETINGS.

General Meeting.—The next meeting will be held, by the courtesy of Dr. Neil, at Warneford Asylum, Oxford, on February 12th, 1904.

South-Eastern Division.—The Spring Meeting will be held, by the courtesy of Dr. Hunter, at the West Ham Borough Asylum in April, 1904.

South-Western Division.—The Spring Meeting will be held, by the courtesy of Dr. Brayn, at Broadmoor Asylum, in April, 1904.

Irish Division.—The next meeting will be held in Dublin near the beginning of April.

AFTER-CARE ASSOCIATION.

The Bishop of London will preside at the Annual Meeting of the After-care Association, to be held at London House, St. James's Square, S.W., on Thursday, 11th February, 1904, at 3 p.m.

APPOINTMENTS.

Miller, James Webster, M.B.Aberd., Medical Officer to the Warneford Asylum, Oxford.

Heslop, A. H., M.B., B.S.Durh., Second Assistant Medical Officer to the City Asylum, Gosforth.

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VOL. L.

Part I.—Original Articles.

The Prodromata of the Psychoses and Their Meaning.

By T. S. CLOUSTON, M.D., President of the Royal College
of Physicians, Edinburgh.

IT is a fact in Psychiatry which has by no means been sufficiently recognised, that attacks of mental disease have early symptoms that are often not mental in character ; and it is equally true that in Neurology the fact has not attracted sufficient attention, that all sorts of sensory, vaso-motor and motor symptoms may be the mere preludes to an attack of insanity and not of themselves the real disease. Such prodromata of so serious an event as an attack of insanity are exceedingly well worthy of careful study for many reasons, most notably because the recognition of their true character and their explanation might enable us in many cases to anticipate and possibly to ward off the mental attack. The neurologist who is called in to see a woman suffering from an unusual form of headache, with anorexia, insomnia, and obscure paræsthetic sensations, often misses the real point of the case because he does not realise that such symptoms are, in this particular patient, higher-cortical in origin, and may mean an attack of acute mania in a week if nothing can be done to arrest their course. The psychiatrist often considers a mental

attack as being sudden in origin, and puts it down as an un-led-up-to mental explosion, when in reality there had been sensory and motor symptoms, sleeplessness, and other indications which would have pointed to the existence of previous auto-intoxication, nerve exhaustion, or other disturbance.

The great fact of solidarity in brain action is one just as much to be reckoned with in psychiatry by the clinician and the practitioner as the more striking and evident facts of localisation and specialisation. The occurrence of a widespread disturbance of action in the highest cortical convolutions, such as takes place in an attack of acute insanity, must, after it has set in, almost of necessity affect the sensory and motor as well as the nutritive and vaso-motor functions of the organ. As a matter of fact, such non-mental accessory disturbances and "bodily symptoms" are nearly always present. But why the oncoming of a nerve storm which is to be in its main course essentially mental should be commonly preceded by sensory, motor, and nutritive lesser storms is more difficult to understand. One may be better able to arrive at the explanation after having looked at the clinical facts. Such combined psychiatric and neurological facts require the accurate observations of the family doctor, who has been first called in, as well as the facts seen by the specialist, to settle many of the questions to be discussed in this paper.

Sensory symptoms.—Speaking generally, and including their every degree, disturbances of common sensibility are by far the most frequent and immeasurably the least serious form of neurosis to which nervous humanity is subject. Many women are "seldom without" a headache during some part of every twenty-four hours. In a still greater number headaches are easily set up at any time by very slight causes; indigestion, want of sleep, changes of air and of temperature, worry, harassing domestic incidents, menstruation, over-fatigue, "excitement" of any kind, and alcohol are some of the causes which will inevitably produce headache—slight or severe, bearable or "paralysing." Such nerve storms are commonly transitory and not of grave significance. There are many women, too, not otherwise neurotic, who are subject to headaches and other forms of the slighter sensory neuroses. If we could ascertain the etiology and the true meaning of such minor nerve disturbances we might find ourselves well on the

road to the explanation not only of the sensory prodromata of melancholia, but of some of the forms of melancholia itself. Take the following case now under my care. A lady of 50, who has been subject at times to headache and a "weary," painful feeling in the back of her neck and down the upper part of her spine all her life when tired, but was otherwise strong, well-nourished, and vigorous, had a special anxiety and much exhausting nursing. These head and spine symptoms became not only greatly aggravated, but continuous instead of being intermittent. They unfitted her for any exertion, mental or bodily, and in fact she had to remain in bed all day. There was no temperature and no local tenderness. Their persistence still further exhausted her strength, and the next symptom was insomnia. This of course took her down still further, and in a few weeks she became depressed mentally. When the mental pain came on all the bodily pain went off. In the course of three months she was acutely melancholic, and had to be placed in a mental hospital for treatment. She recovered, but the first symptom of the passing off of the psychosis was the recurrence of the headache and bodily pains. She has had several such attacks since, each one with the same sequence of symptoms. However well she may feel in the intervals, either over-exertion or worry, or a bad catarrhal attack or bronchitis, to which she is subject, will at once bring on the peculiar pains in the back of her head and spine. She then always "has a dread" of her nervousness becoming mental in character. She has the impending feeling of danger and dread which so many melancholiacs have before an attack. It is essential to know that there is a certain amount of mental heredity in her case. This case is a type so commonly met with as to cover very nearly half the field of melancholia. In most cases the headaches have not quite the character of the ordinary "woman's headache": they are more constant, more intense, more distracting and disabling; the patients will not always admit that they are "headaches," but describe them as "peculiar" sensations. Sometimes there are feelings of weight, sometimes of lightness, sometimes a bursting or congested feeling. They are seldom localised, they seldom have the shooting neuralgic character, they are not always relieved by rest and the recumbent position, but rather by fresh air and mild exertion. They have not the character of megrim, and seldom are attended by sickness or vomiting. Their return

in the period of convalescence is so frequent as to make me often glad to hear my melancholic patients tell me they are suffering from headache, and I surprise them by saying, "I am glad to hear it, be thankful, you are soon going to get better of your depression." They are most frequently and most characteristically seen as prodromata of the melancholia which follows influenza. Often they assume paræsthetic forms, giddiness, creeping feelings and sensations of weight or lightness, of heat and cold; they are often so peculiar in character that the patients cannot describe them. They complain of "queerness in the head," "soreness," "discomfort," as if they had "no feeling in the head;" there is scarcely any paræsthesia that I have not met with. Now, what is the cause of such headaches? What is their precise relationship to the mental disease which succeeds them? Are they toxæmic in character? And if so, what is the source of the toxin? Even if they are toxæmic, the toxæmia may be merely a secondary and an intermediate stage and not the real primary cause. Through what series of influences does the toxæmia originate? It seems clear to me that we must look beyond the toxæmia, even if this exists, for the real cause of these neuroses of sensibility in most cases. It is quite certain that Dr. Haig's uric acid theory does not explain them. Vaso-motor disturbances used to hold the field as explanations of headaches generally. I cannot see in any vaso-motor disturbance a sufficient explanation of the facts: there are no flushings or pallors; the general circulation, though frequently poor, is not always affected. No doubt in fully developed attacks of melancholia, especially those of the worst type, the vascular tension is found to be increased; but taking into account the whole clinical history of such cases, it seems to me one must look to a failure of nutritive and dynamic energising of the higher cortical cells for the real cause. It must be assumed that each neuron, whatever its particular function may be, has an innate power of building up its stores of potential nerve energy (anabolism) and of liberating these stores in a dynamic form (katabolism), these two powers being balanced so that the neuron shall neither become, as it were, too full nor too empty. These powers in the sensory neurons are influenced and probably regulated to a great extent from without by muscle action, by the innumerable and constant afferent impressions from the skin and viscera, by direct "interference"

through other neurons, and finally by the blood current. Any disturbance of this most complicated series of conditions of right working in a "neurotic" subject may no doubt cause the danger signal of pain to be put out. To be "neurotic" or "unstable" in brain working means unresistiveness to the influences from within or without that are adverse to life and health. A cold day "braces" one man and brings on bronchitis in another. A difficulty in life, a calamity even, raises up in one man or woman a spirit of dogged fight to overcome or endure it, in another it breaks down the fighting spirit and sets up melancholia. Now, for the development of the mental cortex and its immeasurable and as yet most mysterious attributes, the constant stimuli on the sensory organs acting first on the great sensory "centres" in the brain and then their transmission in proper form to the receptive mental centres are absolutely necessary. Mind, in fact, arises through sensations at first,—*"no sensation, no intelligence."* A human being without sensation would necessarily be an idiot. For the great mental functions to work healthily, a healthy sensory system is unquestionably needed. If the sensory system is hereditarily weak or is exhausted or starved or poisoned, then the mental centres that it keeps going must soon exhibit disturbance. Hence I think we have the common sequence of sensory neuroses and melancholia. It is a physiological and psychological fact far too often forgotten, that for a healthy working mind we must have a normal working sensory apparatus. Why does sunshine produce cheerfulness? Or fresh air a feeling of organic comfort? Or the sweet influences of nature mental calmness? The first step in the process is the reception of the sensory impression, the second is the mental effect. The mental areas are only got at through the sensory. The one mostly exists for the sake of the other. The mental areas are like the yoke of an egg—they float in and are entirely isolated by another kind of medium; or rather are like a busy city on an island, its food, its commerce, its electric wires and every source of its life and activity being carried to it through the surrounding sea. A hurricane in that sea comes first; starvation, misery, and inactivity in the island come next as necessary effects. Sensory disturbances arise first, disturbing impressions are sent to the mental cortex, and melancholia or mania, stupor or mental dissolution come next as natural physiological sequences. The sensory areas are the gateways to mind, and

so suffer first. An over-sensitive constitution is commonly the basis of the melancholic diathesis. This means that the sensory impressions in such a case are strong and overpowering. A current of electricity sent to a muscle may give tone to it, or may set up a convulsion, or may paralyse it. A sensory impression sent to a mental area may in like manner give pleasure, or it may stimulate unduly and so cause melancholic pain, according to its strength,

By keeping the necessary relationship between the sensory and mental activities of the brain in mind, many of the clinical facts of an attack of melancholia can be explained, and many suggestions can thus be obtained for its proper treatment. It must be kept in mind that melancholia in most of its forms is by far the least serious disturbance of the mental areas. It is the psychosis next mental health, and in the more severe cortical explosions of mania more or less of mental depression comes first of all, thus preceding the deeper mental dissolutions.

The sensory symptoms of pain or of paræsthesia are not confined to the head, though most commonly felt there. I have known many patients to have spinal pains and visceral pains preceding attacks of insanity. I have now a patient passing through adolescent insanity, with periodic exacerbations of mania. For four or five days preceding each maniacal attack, she regularly has severe toothache. The sensory prodromata of mental disease may take the form of disturbance of special sense functions. I had lately a lady who had marked aggravations of eyesight symptoms, from which in minor degrees she had always suffered before she became melancholic. Nothing is more common than a supersensitiveness to light and noises. I have had cases where *tiinnitus* and buzzing sounds in the ears preceded attacks of mania. I had lately a woman who became almost deaf for months before she became melancholic. I have seen hallucinations of vision and hearing develop for weeks before the other mental symptoms came on, the patients knowing then that they were hallucinations. Flashes of light before the eyes are very common prodromata to attacks of mania. I have known the sense of taste changed, so that a man could not taste his food or his wine for some time before he became maniacal.

Motor disturbances.—Many mental cases have symptoms which show that the motor centres are disturbed before the mental areas are involved. I have known attacks of acute

insanity preceded by general convulsions; but this is rare, though localised twitchings are common enough. That general condition of motor instability known as "fidgets" and muscular unsettledness is exceedingly common. I have met with a marked alteration in the handwriting. I have also seen a patient quite amnesic for days before the mania came on. The most marked and characteristic motor prodromata of insanity consist of changes in the facial and eye expressions. The muscles on which these expressions depend are very small, but most highly innervated, and have a reactivity and wonderful power of co-ordination with each other far beyond any other muscles in the body. Being the mind muscles *par excellence*, they represent emotion and mental action with amazing subtilty and force. Their very subtilty and complications have as yet defied a scientific nomenclature to describe them. Before an attack of mental disease, they often become changed in activity in all sorts of ways. The most common effect is a slowing of their mental reflexes and a deadening of their subtle mechanism. The man about to become insane is commonly changed in facial and eye expressions before his "mind gives way." His eye is either dull or listless, or the cornea has the feverish light on it that accompanies acute insanity. The brow is furrowed, or fixed "lines of care" show themselves on the face of the patient who is approaching melancholia; the play of feature that gives beauty and interest to many faces is no longer seen. There is often an "abstracted" look in the face, which really means that the muscles of expression are morbidly at rest. In this state feeling is purely subjective, with a few objective facial or eye accompaniments.

Neurasthenia.—That vague, but real enough, condition, which Beard called "neurasthenia," frequently precedes mental attacks. It is, as we all know, difficult to describe or classify, but it means nervous and nutritive exhaustion and unreactiveness to usual physiological stimuli. It certainly has a close kinship to the psychoses in its nature.

Insomnia.—There is no symptom more common as a prelude to the acute insanities in almost every form than insomnia. It often precedes the mental attack by many months. What is its cause? What is its pathogenetic explanation? What is its significance? These are questions that have been asked by psychologists and by general physicians from the earliest times,

but no satisfactory answers have yet been given. The mystery that has shrouded the physiology and psychology of sleep has never really been lifted by any of the theories which have been put forward for its explanation. But one thing seems quite certain, the mechanism of periodic brain rest in sleep is most intimately related to the mechanism and mental activity in the brain cortex. The whole body sleeps more or less, but the cortical vehicles of mind have their proper functions more completely suspended than any other organs during sleep. In no class of diseases is the sleep function so disturbed and so much an essential part of the disease, and so constant a prelude, as in the psychoses. When the mental functions are about to be disturbed, sleep is disturbed, may be put down as an axiom. All sorts of vascular theories have been put forward to explain sleep and sleeplessness; I am absolutely convinced that these do not explain the matter. We must look to the cortical cells themselves and to their essential physiological qualities for an explanation of sleep and its disturbances. When the proper balance between anabolism and katabolism is disturbed in the mental area, then you have insomnia, together with mental disturbances, nightmare, disturbed and distressed dreaming, and night terrors, all these being common preludes to mental attacks. Many interesting changes in the kind of sleep and in the modes of going to sleep and of waking are met with: the semi-conscious sleep, the unrefreshing dreamy slumber, the short snatchy sleep are common. Some people are afraid to go to sleep, they "have such dreams."

Hysterical attacks.—It is surprising how common are hysterical attacks and a general hysterical state before the advent of what is commonly recognised as insanity in the female sex. That is what might have been expected, for all the best and most recent writers on hysteria recognise its kinship to mental disease, and put the mental element in it as being of far more importance than used to be admitted. In fact, one may say that some of the best authorities put down this element as being a quite essential one, and the most important of all.

Circulatory disturbances.—All sorts of circulatory disturbances frequently herald an attack of insanity. Fainting fits, weak heart's action, palpitation, alterations of rhythm, striking changes in the vascular pressure, feelings of "sinking at the heart," are all common. I have seen in the "quick-pulsed"

melancholiac the alteration of the heart's action for weeks before the mental symptoms come on, but this is the exception, no doubt. The capillary circulation often loses tone, the cold-resisting and heat-producing apparatus suffers. Vaso-motor disturbances occur, notoriously in the climacteric woman about to become insane, in whom flushings, "heats," sensations of giddiness long precede the mental symptoms.

Blood changes and leucocytosis.—As yet we know too little of the blood changes in mental disease to speak of them in connection with the commencement of attacks, but Dr. Lewis Bruce has made the observation that after a patient has suffered from certain forms of mania there is a persistent leucocytosis, and that if such a patient relapse there is a marked fall in the leucocytosis, and especially in the polymorphonuclear cell-percentage prior to the onset of the attack.

Nutritive and digestive disturbances.—Nutritive and digestive troubles often precede the mental symptoms for a long time. Indigestion, dyspepsia in every form, attacks of vomiting, anorexia, falling off in weight and muscular flabbiness, are all common, especially before attacks of melancholia. Constipation and altered bowel contents in directions pointing to imperfect digestion, primary and secondary, are present in over 50 *per cent.* of the cases as prodromata of various forms of insanity. A melancholia of the digestive tract in the shape of obstinate constipation and distressed feelings in the epigastric region precedes and accompanies half the cases of melancholia. Toxic symptoms arising from the intestinal contents have attracted much attention lately, and all sorts of bowel disinfectants have been used, such as calomel, salol, etc., in some cases with very good effect. The relief experienced through a smart purge is a commonplace in therapeutics in such cases. I believe many attacks of insanity are warded off by this means and by appropriate dieting, just as attacks of epilepsy are often so prevented. The acuter insanities and general paralysis are specially apt to be preceded by marked intestinal or gastric catarrh.

The modern toxic school has pushed the theory of intestinal infection so far as to attribute most of the cases of melancholia, of acute mania and general paralysis, to the toxic effects of adverse bacteria which most commonly originate in the alimentary canal. If Dr. Ford Robertson's theory of 'general

paralysis being due to a specific organism commonly originating in the intestinal tract turns out to be correct, we shall in future have to fix our attention on this region far more than we have hitherto done. Certainly the extraordinary developments of bacterial life in the mucous membrane of the stomach, intestines, and bowel, which he has discovered and to which he has so strongly directed our attention in general paralysis and in senile insanity, are most striking, even if they should turn out to be only secondary instead of primary infections. It is one of the finest examples of the fact that we commonly don't find what we don't look for, that for so many years we should have examined *post mortem* so many hundreds of cases of general paralysis and never have seen the evidences of this catarrh till Dr. Robertson directed our attention to them, and now we seldom come on a case where they do not exist. I have known six stone in weight lost in the six months preceding an attack of insanity. There is no more common advice than that which I give to my recovered patients to weigh themselves every month and go to the doctor whenever they find they are steadily losing weight. I am satisfied from my experience that many attacks of mental disease could be avoided if digestive and nutritive prodromata were attended to and counteracted. It is not only true, "make a melancholy man fat, as Rhasis saith, and thou hast finished the cure," but "keep fat" if thou art prone to melancholy.

Menstrual derangements are exceedingly common prodromata of attacks of insanity in women. Amenorrhœa is particularly common.

Mental prodromata.—Long before such mental symptoms appear as constitute "mental disease," we often see subtle mental changes, such as changed emotional states, "deadness" of feeling, hyperæsthetic emotional states, morbid anxieties, accentuations of natural temperament, painfully conscious "nervousness," irritabilities, inability to fix the attention continuously on work, loss of energy, stubbornness, antipathies, mental automatisms, morbid suspiciousness, and the beginning of delusions of the nature of which the patient is then conscious. But those may fairly be said to be the psychoses in a minor degree and not really prodromata, but rather integral parts of the attack, though coming before the main symptoms.

I have not gone into the special prodromata of general

paralysis. They are too numerous and characteristic to be dealt with in so sketchy a paper as this. They need further study in the light of modern neurological and bacteriological investigations.

General considerations.—A general consideration of the character and frequency of such facts from the physiological and pathological, as well as from the clinical points of view, leads to the inevitable conclusion that an attack of mental disease is commonly not a simple or localised phenomenon. They show the solidarity of action of the whole of the brain and of the whole of the nerve centres in the cord and the special ganglia of the organic systems of the body. They seem to point to the fact that the lower parts of the sensory apparatus very often break down before the mental apparatus in the highest regions. They seem to prove the mental cortex to be the centre of the organism, and teleologically its end. In this way they point to a greater resistiveness against disease in the higher centres. They show that it is chiefly in the brains hereditarily predisposed to the psychoses, those in fact whose "defences" are weak, that this natural resistiveness breaks down, for all physicians know that all the symptoms that I have mentioned as common prodromata of insanity occur frequently in non-predisposed persons without any mental attack following. They point strongly to the importance of a more careful study and attention to such preliminary symptoms in predisposed persons. They emphasise the view that the whole class of "mental diseases" should be regarded and treated not as local disturbances, but as widespread departures from the normal physiological condition of the whole organism.

DISCUSSION

At the meeting of the Scottish Division held at Edinburgh, November 27th, 1903.

Dr. HAYES NEWINGTON.—I am sure the hearers of this valuable paper are most grateful to Dr. Clouston for having provided us with such accurate and faithful pictures of what we see so often. At the end of the paper Dr. Clouston recognises the fact that it is difficult to say what are the prodromata and what are the evidences of disease. There must always be that difficulty, and until we settle that point I am afraid that there will be some little instability about our statistics. Curiously enough this question has to-day caused considerable trouble to the Statistical Committee when dealing with the term "duration of insanity."

Dr. YELLOWLEES.—We have listened to an extremely interesting paper, putting before us, as you have said, remarkably well facts with which many of us are very familiar. Perhaps the facts concerning those prodromata, those early indications, are more seen in private cases than in asylum practice, because in the

asylum the incipient and premonitory symptoms have disappeared. My experience finds itself translated perfectly in Dr. Clouston's language, and I have listened to the paper with great interest. Of course this must be said, that very often what we afterwards recognise as premonitory symptoms would not have been thought twice about if they had not been followed by what seems their explanation. We are all familiar with the fact that most of us exhibit at certain times peculiarities, both physical and mental, which do not necessarily entail any tragic result. I heard a good story to-day, which I shall ask Dr. Hyslop to tell us afterwards, as to how comic these indications may be. I don't think there is any more than this to say, that these disturbances are, as Dr. Clouston called them, disturbances of the lower nerve centres, and simply mean that a storm is threatening. I am afraid we don't know enough pathologically to locate them, but that does not lessen their extreme importance as indications and the desirability of looking out for them, and also, I should add, the importance of not attaching too much significance to them. If we look carefully we will find many who have these manifestations habitually and who are not insane at all. I have been much pleased in listening to the paper and finding it to crystallise so perfectly all that we know and ought to observe on the matter.

Dr. HYSLOP.—This paper has very much interested me. The last paper I heard read on the subject was at the Harveian Society in London, a paper read by Dr. Savage. The impression was very remarkable—each man went home thinking that he was suffering from some form of trouble, all except myself! These prodromata might be magnified indefinitely, and I am very glad that Dr. Clouston did not refer to general paralysis. One practical outcome, and it is a most important one, has been suggested by our Chairman to-day. At the Committee this morning I did not like to speak too much on it, because it seemed like bringing class-room work into Committee, but it is a question which one would feel inclined to answer at length, and it must have engaged the attention of everybody. Where are we to draw the line between the prodromal and the acute stage? Dr. Hughlings Jackson assumes that in dealing with mental disorders you have two factors, the positive factor and the negative factor. You have the positive consideration of delusion or illusion, and you have the negative lesion or something that prevents that individual knowing that he has an illusion. Now, clinically, we know that almost invariably the first evidences of psychosis, apart from brain degenerations, are perversions of the actual senses, and these perversions are in the form of some illusion, or hallucination. When, later on, the negative lesion appears the individual fails to appreciate that these are not perversions of the senses. Then the border line is passed between sanity and insanity, and the individual is no longer able to correct his false impressions; what was formerly a sane delusion becomes an insane one. One sees this also inversely in convalescence. Dr. Clouston has laid stress on the relations of the sensory organs, and I agree with him. Just as a physician would approach a case of illness by inquiring into the food supplies and how the body was digesting them, so we, as psychologists, have to test the mental food supplies. These are derived by way of the special senses, and I take it that every student begins to study the mind by testing the food supplies. If, however, we once begin to discuss taste, hearing, and so on, I am afraid that we will never stop.

Dr. URQUHART.—In any case of insanity what are the prodromata? That is a very difficult question to answer. I hold generally that in regard to asylum statistics we must consider the attack to be the certifiable attack. The prodromata are quite chaotic. I don't think you can get nearer to an answer than to regard the prodromata of insanity as all that has occurred of a morbid nature before the person could be certified insane. You might as well ask one to chalk off the foundations of a rainbow as to ask when a man becomes insane. It is a question on which two men probably could not agree. It seems to me that it depends very much on the personal equation of the physician. When you talk about prodromata you cite such a terrible array of symptoms that I don't wonder some of the Harveian Society went home rather uncomfortable. I think that you could take almost any nervous trouble imaginable and write it down as a prodromata of insanity—if you find insanity afterwards. Personally, in dealing with the question statistically, it seems to me that the best way is to regard the duration of the attack as the duration of the certifiable insanity, and the previous neurotic symptoms the

initiatory symptoms, which are so indefinite. As Dr. Hyslop said, they may endure for years.

DR. MARR.—I have been much interested in the paper brought forward by Dr. Clouston. The borderland between sanity and insanity is a question to which more attention has been paid by French physicians than by our own English observers. Quite recently this subject was considered in the archives issued from the laboratory of the Salpêtrière, in a volume entitled *Obsessions and Psychasthenia*. The term psychasthenia was applied to the mental affections found associated with neurasthenia. The fears (phobias), pains (algias), etc., of which there are numerous cases instanced in the particular volume of the archives mentioned, are most interesting to the alienist. They cannot be neglected, as the patient suffering from them may pass on to real insanity. In all these cases there is no doubt that the element of heredity prevails. They are sometimes confused with melancholia, but are distinguished by the fact that in obsessing persons the patients do not follow up their ideas to a logical sequence. The cause of the disease is in many cases produced by some autogenetic poison. Dr. Haig, in his book on uric acid, shows the relation between such autogenetic poison and nervous affection, and the danger in treating such cases is not so much in the way of under-feeding as in the way of over-feeding; too much nourishment may be given in the diet, and in this way material is provided which adds to the toxin already in the system. Treatment as a rule should be varied according to the individual cases one meets. One must be careful to avoid definitions of such cases. Burke, in his essay on *Thoughts on our Present Discontent*, says that no one is able to draw a stroke between day and night, but everyone can tell when it is day and when it is night. You cannot say exactly a person is suffering from psychasthenia with obsessions or psychasthenia with fixed delusions, which is designated insanity.

THE CHAIRMAN.—As no other gentleman seems to wish to speak, I venture to express the feeling of the meeting of thankfulness to Dr. Clouston for his paper, and also regret on his not being able to be here to answer all the various criticisms that have been made on it.

DR. BRUCE.—I should like to be allowed to say a few words on Dr. Clouston's paper. On the question of prodromata being treated so that attacks of insanity could be arrested, when one looks at cases of insanity it is so difficult to come to a diagnosis of acute insanity itself that it must be difficult to say what form of insanity is to follow certain prodromal symptoms. But I have no doubt that if in future (and it does not lie with the asylum physicians) minute observations were made on the physical condition of these patients who showed prodromata it is quite possible that, tabulating the results, one might find that certain symptoms preceded certain forms of mental disease. As to the difficulty of knowing when prodromata end and insanity begins, I quite agree with the various speakers. It certainly cannot be, as Dr. Urquhart says, when the man can be certified, because we all of us get patients sent to our asylums who are not insane, and who have been certified.

The "Psychology" of Jane Cakebread. By ROBERT JONES, M.D., Medical Superintendent, Claybury Asylum.

THE subject of this paper might almost be said to have achieved immortality, and it may be doubted whether any other woman—in London at any rate—ever attracted the attention of the public to such a degree, or was the cause of so many newspaper paragraphs, during the closing years of the reign of

the late Queen Victoria, as the demented inebriate whose morbid character we shall attempt to analyse.

She was the heroine of hundreds of convictions, and her life was a cruel farce of "hide-and-seek" in the purlieus of the police-courts. Although many were her challengers for notoriety, probably no predecessor, and certainly no successor—during the four years which have elapsed since her grave has closed—has ever eclipsed her record, and she held the field against all comers.

The Inebriates Act of 1902, which has now been in force just over a year, has made it impossible for such a tragic and sad career ever to be again flaunted before the public notice, for magistrates may now commit such cases to be compulsorily detained in reformatories.

"Jane" was the amusement and the excitement of the street boys, who molested and baited her for sport. She was the ban of the London police, to most of whom in certain districts she was personally known, and she was the puzzle of the stipendiaries. When Jane needed protection from the *gamin* in one street, the officer of the law contrived—with the ability, the tact, and the chivalry characteristic of this great force—to avoid her and to locate himself in another.

A well-known Radical peer once justified the existence of the House of Lords by stating that whatever a peer did he did it well and thoroughly. He urged upon his audience that when a nobleman's failings were successfully emulated by one of the lower classes, and any of them became thoroughly intoxicated, his condition passed into a proverb, and he was then described as being as "drunk as a lord."

Jane was no sham drunkard, nor the heroine of an ambiguous adventure, and she "faced the music" no fewer than 280 times, being sent from the police courts to prison, thence into the streets; again to re-enact the same scene with something like repeated regularity. Later in her career Jane became to the benevolent and the casuist an object of sincere pity and sympathy. She became an interesting study to the social scientist and a serious problem for the statesman. It was the difficult case of her notoriety that served as the proximate cause of the passing of the Inebriates Act of 1898. After many vicissitudes this notoriously intemperate person drifted into an asylum for the insane, where for nearly three years, in spite of

many restrictions, she found more rest and less hard care than had for many years previously been her lot.

On January 31st, 1896, Jane Cakebread, stated to be sixty-two, but whose real age was sixty-seven years, was admitted into Claybury Asylum from the Hackney Workhouse, having been previously in Holloway Prison. She was described as a servant, but for more than thirty years she had probably done no self-supporting work. Her medical certificate described her as rambling and incoherent, as having threatened others, being given to violence and to the use of unprovoked bad language. She exhibited delusions of an exalted and grandiose character, believing herself to belong to "nobility," that she had a legacy of £3000 left her, and that someone had stolen £57. She was strong in the belief that she was "a lady of high character" and entitled to a fortune. Dr. G. E. Walker, of Holloway Prison, stated that he always considered her to be of impaired intellect, but that lately marked deterioration had taken place, and he considered her not to be responsible for her actions.

Upon admission she looked an elderly person, but less than her real age, sixty-seven years. She was 5 feet 3 inches in height, sparsely built, and weighing 8 stone. She had grey hair and grey twinkling eyes, the pupils of which reacted equally and well. Her eyesight was not good, she had commencing cataract, and also some ciliary blepharitis, with a few irregular lashes which caused some irritation of the corneæ. Her general facial appearance was strikingly characteristic. She had mobile features with a gracious condescension. Her mouth indicated a strong and stubborn character. She had a pleasant smile, long thin lips, reflecting power and passionate anger, and an exceedingly good double row of clean teeth in a square-set jaw, suggesting great firmness of purpose and determination of character. Her strikingly pleasing smile could be suddenly or momentarily transformed into a stern, scathing contempt, and she could pour forth vials of undeserved wrath and infamous reproach with loud declamation. Her bodily organs apparently were exceedingly healthy for a person of such irregular life, with a record of so much privation and drink. Her heart beat well and regularly, and she had a pulse of 76 of good volume. There was nothing to indicate any lung disease, although there had been on the part of this unvanquished champion of irregularity much exposure to uncongenial surroundings and inclement

weather during the previous winter. Mr. Thomas Holmes, the well-known missionary at the London Police Court, who had been to Jane—as to many other unfortunate persons—a true friend, states that during the great frost of 1895, for nine weeks she lay out of doors ; her lodging the bare ground, her bed a bundle of sticks, and her dressing-room the banks of the River Lea, in which she had her daily morning's wash, often breaking the ice for the purpose. She was country born, and the associations of an out-door life always remained with her.

Mentally, upon admission, she was noisy, excited, violent, and threatening. She had much scratched the nurse who brought her, and she was received in restraint. She believed the nurse was the cause of her being brought to the asylum, and she denounced her vigorously for "lies and cruelty." She made incoherent and rambling statements in regard to self-exaltation. She believed herself to be one of the nobility, and that she had several thousands of pounds, which had been left her. She was not amenable to discipline, and at first refused to get up or to go out like the other patients. She repeated herself frequently, making the same statements over and over again, exhibiting some dementia. She made groundless charges against the nurses, and there was much moral obliquity. She was untruthful, shameless, and given to uncontrollable attacks of vehement abuse and violent temper, during which she was dangerous to others. For a time she refused food, unless she was given "wine," for which she craved on several occasions. She was tried in the dormitory on admission, promising to behave herself and give no trouble. With a strong effort of will and for one night only she did this. On the second night she became very noisy, struck those about her, and had to be placed in a "single room" to sleep. She was very uncertain in her conduct and conversation—with a smooth tongue charged with flattery and praise she would become suddenly abusive, giving way to very bad language ; loudly and vehemently declaimed.

After one month she was much quieter and more contented. She was full of promises, often "all smiles," but she had no self-control. At the end of two months she had relapsed several times ; and her mental condition alternated between a clean and tidy behaviour and that characterised by self-neglect and aggressive violence. Her memory as to

recent events was impaired, but that relating to remote periods was good. She repeated the same statements each time she was seen, and she did not seem to remember having seen the medical officer before. At the end of eight months she appeared to be more childish, and there were symptoms of progressive deterioration. She was often abusive and noisy. She used to ask for beer and stout as well as wine from time to time. She was most untruthful, and could not bear any contradiction of her statements or crossing of her wishes, returning a tornado of abuse at the least imagined slight. She frequently quoted scripture and hymns, and always liked notice.

At the end of a year she was just the same in regard to the want of self-control. At the end of two years there was no improvement, and at the end of three years she appeared to be more demented; frequently made groundless charges which she could not support. She was very vain and jealous, exceedingly troublesome through her interference with other patients over whom she desired to show authority. Often abusive, insulting, and given to the use of very bad language. About this time she gradually developed dropsy. Her heart showed signs of failure, and after several weeks in bed with increasing weakness—during which time she was much less troublesome, except that she refused all stimulants ordered for her—the vital powers ebbed, and she died in her seventieth year, of heart failure and dropsy, with cirrhosis of the liver and kidneys.

On *post-mortem* examination the brain was well convoluted, and was a good size and weight, but there was some wasting of the central convolutions and a few old adhesions at the apex of the right lung. Marked atheroma of aortic arch. Heart was fatty, and there was hypertrophy of the left ventricle. The liver was distinctly “hob-nailed,” the substance being fatty and indurated. The same condition extended to the kidneys and spleen, and the abdomen and lower limbs were markedly dropsical.

As to her family history and previous record, I am mainly indebted to the Chief Constable of Herts, at Bishop Stortford, and Mr. Holmes. In his *Pictures and Problems from London Police Courts*—which is a singularly vivid and a profoundly interesting account of human tragedy—is written an interesting “Life of Jane Cakebread,” and it is from this volume and some private correspondence that I am enabled to give her ante-

cedents. Jane was a country woman, born of humble parents of the small farmer class in Hertfordshire. Her father died at seventy-one years of age, and her mother at sixty-two years. There was a family of eight children, five sons and three daughters. The histories of all these are known with the exception of one sister. There is no record of insanity or drink, and so far as is known the whole family, with the exception of Jane, were respectable, but poor. She had some schooling, but not much. After leaving school she went to service and became what she called a "single-handed parlour-maid." To commemorate the death of some connection of a family she lived with, she committed to memory certain chapters of the Bible, more especially one from the Book of Job, in regard to the uncertainty of human life. While in service someone left her a legacy of £100. She did no work after that! She appears to have carried the money about with her, and either wasted it or got robbed of it. Then began her life of inebriety, which for over thirty years was an open sore before the public eye.

Dr. John G. Pitcairn, Deputy-Governor of H.M. Prison, Holloway, wrote to me saying that Jane Cakebread had been in and out of Millbank Prison for many years before 1890, and that when Millbank was then closed, and females were first received into Holloway, she came under his observation. Miss Constance Warner, the Secretary of Lady Henry Somerset's Farm Colony and Childrens' Home, wrote to me that Jane Cakebread was at Duxhurst, Reigate, for about three months, and they were unaware of any points of interest in the case. Dr. George E. Walker, Governor of H.M. Convict Prison, Aylesbury, writes stating that Jane Cakebread was the primary cause of the passing of the Inebriates Act, 1898, which authorised the Home Secretary and the councils of counties and boroughs to provide special homes for habitual drunkards. In less than five years the Act had resulted in six certified reformatories being established, accommodating 428 persons. Of those sent into these homes, it is interesting to note that 25 *per cent.* were found to be mentally deficient, some of them proving to be certifiable lunatics. Dr. Walker also states that it would be almost impossible to find throughout the country a more troublesome lot of women to deal with, an opinion which I need hardly confirm.

To deal more fully with the time that Jane Cakebread was under observation in Claybury, we can state that she exhibited certain particular mental conditions, such as vanity and self-conceit, self-complacency and self-esteem—the collective interests of the individual,—but she had no pride. She was jealous and had the love of approbation, some desire for fame (of a kind), with marked ideas of exaltation, the love of power, and the appreciation of a sort of glory. These were all marked features in her character. She also had the peculiarity of showing marked emotions of reverence, for she had a strong undercurrent of religious sentiment; and although peculiarly selfish, she had some tender feeling towards others, especially men and children. She had, however, certain other *traits* which indicated deterioration, and which are more or less characteristic of the drinker, she was untruthful and deficient in self-control, her inhibition was so affected that she passed suddenly and almost instantaneously from blandness and graciousness to blasphemy, vituperation, and abuse; and these irascible emotions were to all appearance unprovoked, as in all her moods she was essentially hasty, changeable, and impulsive. I do not think she derived pleasure from her anger. Unlike the old Arcadians—who, if unsuccessful in the chase, showed their resentment by pricking with their arrows the wooden statue of Pan, their deity,—Jane never wounded personally; her anger was not a desire to put anyone in pain, but a mere method of expressing disagreement, which she did forcibly. Although impulsive, she was never vindictive, and she never experienced the pleasure of malevolence in regard to those she disapproved of, and who she imagined had roused her wrath—as is usual when a supposed injury urges us to resist it, and to inflict pain upon its author, and to experience gratification at the suffering inflicted. Her vanity was founded upon certain fixed preconceptions in regard to her imaginary charms. She would repeat incessantly that she was “of the nobility,” that she was considered to be a very beautiful woman, and that she had a fortune—which, needless to say, were delusions. With these ideas controlling her thoughts, a belief in conformity with them pervaded her mind, acting as motives to all actions towards which she directed her attentions. She derived much of her pleasure from mentally revolving her own merits, excellencies, capabilities, and what she considered to be her very imposing

adjuncts. It is well perhaps for our self-complacency—and Jane in her infrequent quiet moods was essentially self-complacent—that we do not see ourselves as others see us. By disposition Jane was hopeful and cheerful, she always seemed radiant with *joie de vivre*, a kind of infantile hilarity and mirth such as children delight in when "making a sensation." Psychologically this is probably a rebounding elation of conscious power, and, as Mr. Holmes says of her, "everything was for the best with her and just as it should be, and even in her most pitiful condition she had an inexpressible gaiety about her." She used to curl her hair in the wards, and she was often discovered in a forest of curl-paper. Her hair was thin, grey, and short ; but she imagined she made great *coups* when the doctors came round, and she would decorate herself with bits of ribbon and patches of lace in anticipation of impressing them on their visits. Possibly poor Jane wondered why we laughed at the "peach-coloured suit" or the "blue coat with gilt buttons," possibly also she had her own views about our "puritanical perpetual black," and she would probably agree that we are a "dull, sad, and dreary people," and are made to look ridiculous, "bridled-up about the neck, be-chimney-potted above, be-heeled below, and be-girt and be-buttoned all around." At any rate, Jane's greatest pleasure was to "show off," and her vanity was notorious and amounted to a disease. It was marked to such an extraordinary degree that when in the police-court the moment was bliss in which her name was announced by the gaoler. It was the very breath of life to her, and it proved ample compensation for the discomfort of a night in the cell. She had few greater joys than to read cuttings or extracts about herself in the police news, and she delighted in conveying her happiness or merriment by what she called "making the magistrate laugh." A great peculiarity of Jane's was never to wash in hot water. Her appearance was untidy, but in her personal habits she was essentially clean, and her country-born tendencies could not tolerate the amenities of town life. She used to write letters about living in a beautiful country cottage, where the birds sang, the trees gave a shade, and the breeze blew. There is little doubt that Nature's "vernal impulse" affects the mind of the weary and the afflicted as it did the sane mind of Wordsworth in the poetry so often and vividly recorded by him. Jane was always very jealous about

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those of her own sex, especially the nurses who had charge of her, whom she distrusted, and who, she thought, won their way with others at her expense. She dearly loved to interfere with them, and in this she was peculiarly intolerant of their control, and would often attempt to suppress their individuality and authority from her own love of power and influence. It was her firm belief that it was she herself, and not the nurses, who ought to take the instructions of the medical officers about their patients. Jealousy is a monster whose very essence is to detract from our own sense of superiority or our influence, and the suspicions of such a lowering of prestige stung her to the quick and aroused her strongest resentment. Possessing all her supposed influence and attractions, she was fully persuaded that she was in Claybury to supervise the treatment of the patients around her; and in support of this view, which was not contradicted, but humoured, her conceit sought for its sustenance the applause and the admiration of those in authority, or whoever happened to pass through the asylum as visitors. The coinciding opinion of another person, as we all know, not only sustains, but also strengthens our own opinions and sentiments. Is it not true that our self-complacency burns brighter and our estimate of ourselves is made more secure when we are complimented by the coinciding expression of another person? The joys and depressions of our everyday life are greatly influenced by the views of our fellow-creatures and the opinion of society in regard to us. These certainly occupy a high place in our consideration. Such was also the case with Jane. She had a settled opinion about her own merits—in accordance with the proper psychological analysis of self-esteem and self-conceit,—and she always accepted tributes of admiration as an unchallenged right.

Jane was always pleased when praise or approval was bestowed upon her, and she derived considerable satisfaction from contemplating herself in conformity with her own preconceptions. This love of approbation, when analysed, is really only a heightened form of self-gratulation, and is pre-eminently selfish. Jane generally accompanied the medical officer, or followed a visitor through the ward, in order to stimulate the confirmation of other persons in regard to her good qualities; but not infrequently she had to forego this appreciation. She submitted, however, to this oversight with resentment, and she would pour blasphemy

without stint upon those who, unwittingly or otherwise, denied to her the recognition she thought due to her *status*. She was always eager to explain to whomsoever listened that she was "Miss Jane Cakebread, a lady by birth;" and, if opportunity occurred, she delighted to act the character. She referred to Lady Henry Somerset with the usual vulgar admiration for a titled person, but she recognised also the affability and the kindness of this distinguished philanthropist. It was consonant with her behaviour in the asylum to make promises that she would bestow "beautiful needlework" upon those who pleased her, and more especially if such were of the opposite sex. Many were the garments she used to tear up to make linen and other mats, and the ornaments she appropriated to make flowers or attempts at embroidery as a token of her appreciation of notice; indeed, her continual appeals to others for recognition were a great feature. Mr. Holmes relates how she once, in the position of a *grand dame*, sent him a note of invitation to tea. On one occasion, after her release from prison, he, at his own expense, got a poor woman to rent Jane a room for a few days, stipulating that she should provide her own food, also at his expense. True to her alleged *status*, Jane provided herself with French rolls, new-laid eggs, nice dinners, and snug teas. Meanwhile the invited guest appeared, and was received with suppressed excitement. With her *penchant* for the opposite sex, she immediately proposed that he should share her fortune! Alarmed at the possible consequences of such behaviour on the part of his grey-haired Psyche, he realised the delicate situation, and without suggesting that she had effectually extinguished the torches of Hymen, he requested that time be allowed him to consider his prospects, and he beat a hasty retreat. Her susceptibility to the opposite sex was, in her, I am convinced, an impersonal love and more an æsthetic interest in those about her than a romantic emotion. It was something similar to the love of truth, or of beauty, or as we admit the love we may have for American women or Japanese soldiers. I believe this complex emotion of love in her case to have been based upon quite elementary excitations, such as the love of approbation, self-esteem, admiration, and various sensations and sentiments attached to these which we have referred to as dominating her nature. It was immaterial to Jane whether a workman passed through the ward, or a male patient worked at

the bottom of the garden, or a distinguished visitor accompanied the medical officer. Suffice it that he was a man or a male, Jane never discriminated, her blandishments were distributed with equal favour to all or either. Jane had no *self-sufficingness*. She depended too much upon the opinion of others, which possibly contributed to her downfall! At the same time I believe that the over-aggressiveness of the self-confident—and we all know such—is an insane development, and I believe it to be on a lower plane of intellectual evolution than the conscious modesty of the altruist. Extreme self-confidence is egotism, and egotism is essentially a symptom of insanity.

I do not believe that Jane had much, if any, pride, nor any real self-respect. The poor thing had small occasion for the sentiment, but psychologically these mental qualities afford a very strong motive to conduct, and as such may exercise a powerful restraint against any lowering by inconsistent conduct of the standard achieved. It would have been helpful to her if she had had these sentiments. In such a case pride becomes a sense of honour. Honour as such she had not; and although given to hymn singing and copious quotations from Holy Writ, I do not think she had any admiration for goodness or excellence, or for the qualities in others that call forth esteem or reverence. Yet Jane was looked upon as eminently religious. Psychologically I believe that this emotion in her was built upon egotism and selfishness, and perhaps the emotions concerned with veneration and reverence are more often thus based than is generally accepted. Jane was so selfish that she could brook no contradiction, and we know that there is often a tyrannical and uncontrollable despotism about those whose office has to do with spiritual work. There is a superiority and an ascendancy about this class—and I state it only in a psychological sense—which tends to raise by a supernatural *afflatus* the most ordinary composition to an apparent efficiency beyond the choicest efforts of others. We know that the authority of the Church is often such that its apostles will brook no contradiction, and there is no more intolerant class than belongs to the religious hierarchy. Witness, for example, the bitterness and the superiority of the *odium theologicum*. By temperament Jane showed to a high degree the greater emotional affectibility of her sex, she had a keen love of adornment with much dependence upon unanalysable impulses of the moment. It must be

remembered that love and religion are the two most volcanic emotions to which the human organism is liable, and when the one is disturbed the vibrations naturally and readily extend to the other. Although vain, she was really disregardful of personal appearance. She was untruthful, artful, and crafty. She was undisciplined, deceitful, and unreflecting. She was also morally depraved—I mean in regard to the higher ethics of good motives and high ideals. She lied, but her mendacity was a disease and due to defective memory, which was a pathological condition induced by alcohol, and the delusions which filled her mind were those of suspicion and persecution. When the nurses spoke they referred to her. They tortured and ill-used the patients, and she feared imaginary harm if placed to sleep in the single room. She was boastful and vainglorious, and she used to describe events in detail which never took place, and although her memory in regard to events long past was faithful and tenacious, that in regard to recent and current events was treacherous and no better than lost. I doubt if she ever remembered for two days running the names of the doctors or nurses she saw daily. She had no tender feeling in regard to self—no self-pity. She never lost her good opinion of her degraded self, nor did she ever express feelings of self-reproach or penitence for her conduct. During her whole residence in the Claybury Asylum no suggestion or suspicion ever arose that her life had been sexually perverted, and no reference to immoral conduct was ever known to have passed her lips. Such psychological characteristics as vanity, boastfulness, self-esteem, inordinate self-gratification, self-glory, and a love of praise, power, and display, cannot continuously and naturally be upheld—only the temporary elation of alcohol can keep these up; the first physiological effect of which is to stimulate the imagination and remove the normal restraint. Once the taste for alcohol is experienced in such dispositions, the descent is an easy one to confirmed inebriety and insanity. The life she led revealed in the end this moral and intellectual degradation, inevitable in all chronic drunkards. She sank in the social scale and became a bye-word of reproach, unfit to associate with sane persons, and an impossible person outside a lunatic asylum.

She masqueraded unblushingly for over fifty years through this cruel farce, for her life in and out of prison was no other.

Yet Jane was no drunkard in the common acceptation of the term, which is that she was always and constantly under the influence of alcohol—the prolonged “moderate drinker” as it is called;—yet she was the typical inebriate, but of the variety of the periodic drinker, and we know that in normal persons the central nervous system has a certain natural rhythm of excitation. Her condition is not uncommonly met with in alienist practice, and the desire for drink with her was an intermittent craving recurring like the visitation of epilepsy or the periodicity of recurrent mania, as was evidenced by the fact that she sternly refused all alcohol when ordered to her medically for some time during her last illness, although at other times she pressed the doctors for drink on many occasions. Jane drank in small quantities only, but the small quantity she took at a time during her life was a poison to her, and brought out in her all that was evil and bad. The merciless sap-draining drink was served to her by people who knew her, and it was given in order to “hear her talk and see the fireworks.” Fortunately such a procedure is now a crime. The restraint placed upon ourselves in polite society to carefully avoid whatever is calculated to hurt or wound requires the force of the Law to enforce it in lower strata.

As to the taste for drink, there is no doubt that it is an acquired one in most of these cases, and, however much the tendency to gratify the desire may be inherited, unless drink is first tasted no craving can be established.

I have written elsewhere ⁽¹⁾ upon the physical basis of the craving for alcohol, and exhibited a sphygmographic tracing before and after its administration in a case of alcoholic insanity which supports the theory advanced by Jennings that the “tableau,” or flattening of the top of the pulse-wave, indicated a physical condition antecedent to, or concomitant with the mental “craving” such as exists for morphia and other drugs, and which is removed after taking the stimulus. This craving appears to be an organic want, and, like the bodily appetites has a periodicity or recurrence which the life-history of every inebriate powerfully exemplifies. Moreover, drink supplied during this period of craving can be taken in very large quantities without inducing the usual physiological effects, and even bottles of brandy may be taken in the course of a few days by one person without symptoms of drunkenness or toxicity; after

which a pause or period of rest follows, during which not only does the person not drink, but the very sight of spirit or its name may cause a feeling of intense loathing or disgust. I feel convinced, after some experience, of the actual presence of this craving, during which the victim to its tyranny becomes an object of deep pity.

The taste for drink once acquired, only persons with strong wills and high moral power are able to resist it, and the end is complete moral and intellectual degradation with confirmed dementia. It is in avoiding the first taste of alcoholic liquor that salvation for these people lies, and even when they have fallen their reclamation is only to be found in total abstinence for the rest of their lives. It must not be taken from these remarks that I am an out-and-out advocate of total abstinence. In my opinion it is a counsel of perfection, and imposes too much restraint upon the demands of reasonable men and women. On the other hand, it is the best working hypothesis for the cure and the prevention of all forms of drinking and drunkenness.

Jane Cakebread's hard life was soured by worries and troubles and ill usage of many sorts, as is usual with such wrecks. She had many vexations, negligences, and disappointments, but she herself had—as we all have—her own life in her own hands; she chose to throw it away, and in consequence she sank to the lowest depths of deserved misfortune. With all her faults and short-comings, her life was a page in the human document, and there was much in her that was likeable and even lovable. The nurses and those who knew her often repeated that, making allowances for her insanity, she was dignified, striking, and attractive, and in her there was much to be pitied.

I am one of those who believe in the perfectibility of human nature. Man was meant to evolve and grow, and not to stand still. In this progress there need be no cessation. Man's life as a rational being depends upon the exercise of his mental capacities conformably to reason, and he can best assist this by promoting his health, growth, and physical development, conscious that the care of his health is a sacred duty of every man.—“Know ye not that your body is the Temple of the Holy Ghost.”

(1) “Mental Dissolution the Result of Alcohol,” an address delivered before the Society of Inebriety, *Lancet*, October 25th, 1902.

DISCUSSION

At the General Meeting held at Oxford on February 12th, 1904.

The CHAIRMAN remarked that Jane Cakebread was not a congenital moral imbecile as many had supposed, but possessed a considerable amount of moral character. He quoted a similar case who ended her life as a dement.

Dr. STEWART (Clifton) said he was glad to hear Dr. Jones speak of the one striking characteristic of the inebriate—their untruthfulness. Most people admitted that the inebriate was a liar, but they did not think of the real cause of the untruthfulness, which was a pathological degeneration of the brain. There was a loss of memory, and he believed the common expression that liars should have good memories was an instance of it. The inebriate was a mendacious person because the memory was extremely bad. As Dr. Jones had said, mendacity was due in the inebriate to lack of memory. (Hear, hear.) Dr. Jones had also pointed out there was a purity of morals in the ordinary sense of the term. He (the speaker) believed the inebriate was more or less so by the brain being reduced by an alcoholic disease, and he did not think anything could have been more fairly put or be more calculated to bring men like himself, out-and-out total abstinents, to study the subject than the expressions used by Dr. Jones.

Dr. SEYMOUR TUKE spoke of the part played by intoxication and that played by imbecility. They had all known cases in which there was an extent of alcoholic intoxication which showed them many of those points that one felt one must distinguish between the two. He was particularly curious about the statement made with respect to purity of morals. He understood that Jane Cakebread's case was in a large measure alcoholic, but they must not forget that in many cases where there was no alcoholic intoxication they got a great many of the same symptoms.

Dr. BOLTON referred to an old woman who had been in twenty workhouses and twelve asylums in the course of twenty years. She said she drank when she could get drink. He thought it was a case which showed rather more dementia and degeneracy than Jane Cakebread, and he would say it belonged to the moral imbecile or degenerate type. If Jane Cakebread was in drink, she probably was not broken down. The case he was referring to was different. When that woman broke down she either went to the workhouse herself or to different asylums. Certainly, then, a case of that kind should be looked upon as one of a prepotential lunatic, and he thought that the influence of alcohol upon normal persons would be very different. He thought such cases belonged to something between the normal person and an ordinary imbecile.

Dr. KINGSFORD said a woman who came under his notice had a good many of the characteristics which had been described, but one of her peculiarities was to boast of reporting public institutions to the Government. Needless to say, they did not give her the opportunity.

Dr. GOODALL said he thought that he heard Dr. Jones say that the ordering of our life was in our own hands. In the present case he did not think it could be applied. Probably it would be found that her tissues were endowed with unusual vitality. What he got up to say was, he thought that it would be interesting to have a record kept of such cases to compare with the normal on an anthropometrical basis. At present they had only the law of impressions to go by as to whether there was degeneracy or not, and it would be better if they had such a thing embracing all parts of the body.

Dr. JONES said he thought that laymen, looking upon those people who were constantly drinking, thought these alone were the inebriates, they did not regard the periodic drinker, of which Jane Cakebread was a type, as belonging to that class, but such a view is confirmed by the fact that the liver was a typical "hob-nailed" spirit-drinker's liver. He did not agree with the suggestion implied in Dr. Goodall's remarks that man acted in obedience to a fatalistic materialism. Whatever might be said of the relationship between mind and matter, there is no support to be had for the suggestion that matter can *causally* determine consciousness, for such a view would destroy the "agency" on the part of conscious beings and cause all our actions to depend upon explosions in nerve-cells. On this theory no judgment could ever be due to a train of reasoning, a volition, or a motive.

Obsessions. By JAMES SHAW, M.D., Liverpool.

REVIEWS, abstracts, and papers concerning this subject having appeared from time to time in the *Journal of Mental Science*, I shall, with the exception of making a few incidental explanatory quotations, confine myself to an account, more or less brief, of some of my own cases and to the remarks suggested by them.

Obsessions are much more frequently met with in private than in asylum practice, and when they do occur in the latter they are often so masked by other symptoms as to be nearly, if not altogether, unrecognisable, except with the help of the history. They may be physiological, as instanced by the catchwords or refrains which haunt the mind for hours or days and then vanish. Like hallucinations, they may be induced by drugs—at all events by one drug.

A diabetic patient of mine, who was recently taking sodium salicylate in moderate dosage, became obsessed by the song "Annie Laurie." This besetment was not unpleasant at first, and the patient would occasionally burst out singing the song just at the point in the wording at which she had mentally arrived at that particular moment. After a few days, however, the melody became monotonous, the salicylate was discontinued, and the obsession gradually disappeared. There was a hallucinatory element in the case, as from the patient's description one could gather that the music was merely a modification of the ordinary salicylic "singing." But the words of the song rose in her mind imperatively like those of a very catchy refrain. In childhood she had sustained fracture of the back of the skull.

Morbid obsessions may be either essential or symptomatic, and in any case they arise, initially at all events, in a state of clear consciousness, and are then, as a rule, easily distinguished from delusions, ordinary psycho-sensory hallucinations, and illusions.

The patient suffering from obsessions is usually able to describe his symptoms fairly well. He is quite aware that his besetments are entirely subjective; is capable of being reasoned, temporarily at least, or at times, out of his morbid fears; recognises any criminal tendency of the inciting thoughts, and

is able, for a time at all events, to resist their promptings ; and, finally, is quite alive to the obscenity, blasphemousness, or absurdity of his besetting words or thoughts. The first criterion in the above sentence excludes hallucinations, except psychical and perhaps psychomotor, of which more will be said later on ; the second and fourth shut out delusions ; and the third eliminates morbid impulses, properly so called.

But obsessions sometimes develop into delusions or psychical hallucinations, or originate active and irresistible morbid impulses. Obsessions, where only symptomatic, may, as the disease progresses, become obscured by the blurring of consciousness and other symptoms. This is exemplified in agitated melancholia of obsidional origin (obsessive or obsessional melancholia). It is also exemplified in some cases of dementia præcox.

Although it has been said that it is not possible to classify obsessions, Magnan's definition ⁽¹⁾ that an obsession is a mode of cerebral activity in which a word, a thought, or an image forces itself involuntarily into consciousness, suggests a classification useful in practice. Thus there are besetting or obsessing words, besetting thoughts and besetting images. For although the first and last forms secondarily induce thoughts and emotions, the besetting words, generally obscene, and the obsessing images, commonly unpleasant, are yet the primary phenomena in the actual obsession, apart from any theory as to pathogenesis.

The besetting thoughts may be crystallized into sentences nearly always of an inciting nature—phrasal, sentential, or inciting obsessions ; or they may be obscene or otherwise unpleasant thoughts or ideas not necessarily taking any verbal, phrasal, or sentential form—ideal obsessions ; or they may precede, accompany, or follow an emotion, almost always of fear, which overshadows them—emotional or phobic obsessions, in which the painful emotion of fear is the real obsession. So that we have verbal, phrasal, ideal, emotional, and visional obsessions. Frequently an obsession can be referred equally well to either of two of these groups, and several forms of obsession may, and often do, co-exist, one, however, as a rule, being more prominent than the others.

Verbal obsessions are those in which isolated words—mostly obscene or blasphemous—constitute the morbid besetment.

They differ from coprolalia, blasphematory mania, (*) and even onomatomania, (*) in that the words are not necessarily uttered.

Verbal obsessions may constitute the leading feature of a sort of obsessional aberration or an early symptom of a form of agitated melancholia which might be called obsessional, obsessive, or obsidional melancholia. An example of each of these has been given by me more at length in another journal. (*) It will suffice here to say that both patients presented marked neuropathic heredity, neurotic constitution, and extreme religiousness. So that the words, which were described by them as obscene, blasphemous, and unutterable, and which were in fact never uttered, caused them intense mental anguish. The case of melancholia seen by me in consultation with Dr. Clegg was removed to a private asylum, where she recovered in about a year, as I was informed ; whereas the case almost purely obsessional obtained admission with difficulty into a workhouse hospital, where the patient was not considered insane enough to be sent to an asylum, and when I heard of him several years afterwards he was, although less agitated, still unfit for his work as a teacher and obsessed as strongly as ever by the obscene words. Both patients had suffered from influenza prior to the mental illness. Both presented motor agitation, especially of the arms.

Phrasal, sentential, or inciting obsessions are besetting thoughts which take the form of isolated sentences and prompt, incite, or impel the subject of them to do certain acts, often criminal, or occasionally to refrain from doing things which would be beneficial.

The following is a case of *folie du doute*, in which the initial doubts and fears were replaced by phrasal obsessions of a comparatively harmless description. A lady, æt. 23, had been married four years and had had three miscarriages, the last at twenty-two. She was little, spare, and pale, but healthy looking, bright, and intelligent. She had lobeless ears, prominent antihelices, and high palate with slight median ridge. Her pupils and discs were normal. She said her father and mother were "nervous" and excitable.

She had suffered more than two years from certain mental symptoms. At first, if she put down or dropped any article, even a pin, she thought it would do her some harm, and picked it up ; then thought she was foolish and put it down again, once

more lifted it, and so on, five or six times. If she touched anything the thought "jumped into her mind" that it might injure her (mysophobia); then she washed her hands. At first she thought anything she did would injure her heart, and, latterly, her womb (nosophobia).

She had got over these ideas and phobias when I saw her. But they had been replaced by symptoms which she termed "exciting thoughts," *e.g.*, her husband had gone down to breakfast before her in the hotel where they were staying, and then her inward mentor kept saying more and more rapidly and urgently, "Hurry up! Hurry up!" But she reasoned with and told herself there was no necessity to hurry. When coming to my house the mentor said, "You will be late; you will be late." But then she thought to herself there would be others waiting, and she could wait too. When she was reading the mentor told her it would injure her to continue to do so, and this thought became so urgent that she was compelled to desist. She knew this was all subjective. She did not speak of "voices," mental or other, and had never suffered from hallucinations in any form.

Sleep and appetite were normal. The patient complained of thrills in her body and flushings in her head and face when the thoughts arose, or when people looked at her in the street. In the latter case she almost fainted, so that she could hardly walk out of doors in the daytime. Her right hand and a portion of one of her legs had felt numb and lost sensation. She had pain in her spine at times, and in the sacral region frequently. She had an urgent desire to urinate even when the bladder was empty, as ascertained by the catheter. Although several medical men, who had examined her, had found her womb normal, a notorious "specialist" had recommended her to wear a pessary, and she had worn one, but without any good effect. She had run through the gamut of the nervine pharmacopœia—all without relief.

My suggestions were to have cold sponge baths, modified massage, and faradism, to live in the suburbs of the large town to which she belonged, to join in games, go to theatres, etc., to read, occupy herself lightly, and resist the obsessions with all her might when they incited her to work fast and fatigue herself, or prompted her to desist from reading. As her symptoms were aggravated at the menstrual periods she was to take, at

these times, a bromide mixture, and, in the intervals, tonics. She was much relieved when assured she would not become worse or insane. Some months afterwards I ascertained she was greatly improved.

The following case is of a more serious type, the depression amounting to melancholia. The patient, a married man, æt. 32, presented stigmata of degeneracy; the face, and especially the ears, were markedly asymmetrical, the right ear being very abnormal, having no antihelix or crus superius and presenting a long, prominent, ridge-like crus inferius, running parallel with the incurved end of the helix, forming a large, deep fossa cymbæ, and leaving the fossa conchæ very small; Darwinian tubercle on both ears, larger on right, etc. The pupils, discs, vision, and knee-jerks were normal, except very slight variable inequality of the first. The patient had a feeling of pressure on the top of his head, and sometimes slight lumbar pain. There was no tremor or feeling of weakness, and the hand-grasps were, right eighty-five, left seventy-five. There was some insomnia. The patient masturbated from the age of fourteen to twenty-one. A "voice" told him, when a boy, that he was not the son of his father and mother. He neither drank nor smoked, and was very religious. Although married, he had seminal emissions at short intervals. All his brothers and sisters have suffered from temporary mental depression. His mother, a brother, and a sister had delusions, mostly of a hypochondriacal character, from which they recovered in two years or less.

The patient had been suffering for some months from symptoms which he himself termed "morbid impulses" to attack others and injure himself. Hitherto, he had resisted these and prevented them culminating in acts, but with great effort, he said. On closely questioning him at different times, it was elicited that vivid thoughts (phrasal obsessions) suddenly shot athwart his train of thought, just as if some one had spoken them. Sometimes these thoughts took the form of questions, *e. g.*, "What are you going to do to So-and-so?" He understood this meant what violence, and he replied mentally. On other occasions they told him to do violence to certain persons, and he resisted. He was well aware that these suggestive mental queries and promptings so foreign to his better nature were subjective. The inclination to strike sometimes arose suddenly without the thoughts or any provocation,

on seeing a weapon and a person near each other. Occasionally, he was unduly irritated by a jest or contrary opinion, and had the inclination to strike. He was in constant dread (emotional obsession) of doing something violent. He picked up the terms "morbid impulses," "loud thoughts," and "voices in the head," when being examined, and would use them afterwards, but the above was the exact state of affairs as ascertained in one of his brightest and most communicative moods. When first asked if the internal voices or loud thoughts seemed ever to be in his mouth (so-called psycho-motor verbal hallucinations), he said, "No, never." Afterwards, when in one of his worst moods, he said they were in his head *and mouth*, but on being closely interrogated, he said they were never in his mouth, *only in his head*.

In addition to these symptoms, he had the fixed belief that his soul was lost; his mind was beset by evil sexual thoughts (ideational obsessions); he heard creakings and "clankings" in corners of rooms (rudimentary auditory hallucinations) and in railway carriages (auditory illusions); he saw flashes of light before his eyes (rudimentary visual hallucinations); and one night, when out driving, real objects took the shapes of people and terrifying forms (visual illusions). Once he asked me if I thought the devil put all the thoughts, etc., into his head, and this was his only hint at external agency. The patient's speech was slow and hesitant, his voice weak and low. He seemed to "fill up" with emotion so as to be unable to speak, and then burst into tears. He said his thoughts were never off himself and his troubles. He was very much afraid of having to go to an asylum, and his wife had a great objection to his being sent to one.

He was put on the combined bromides with belladonna, liquor arsenicalis, and cinchona, also cascara tabloids. He was advised to have rest and change, a hard bed, a reel on his back at night, a morning cold bath, and not much fluid after six p.m. Under this treatment the seminal emissions and sporadic impulses diminished, the inciting obsessions, the illusions and hallucinations disappeared, and the patient, in spite of his fixed belief as to his soul being lost, became comparatively cheerful. But when he had been two months in the country, a friend took him along the brink of a precipice and walked a short distance ahead of him. The patient felt a

strong inclination to throw himself over. To avoid doing so, he flung himself on the ground, held on by the grass, and screamed for help. This incident caused a recrudescence of all his symptoms. He acquired in addition illusions of taste and smell—suggestive of masturbation. Shortly afterwards another friend kept the ball rolling by reading some “horrible tales” to him. The anxiety was increased by financial worries, and the necessity to resume duty, for which he felt unfit. His self-control failed, and he began to threaten violence to, and finally actually attacked his wife. He was sent to an asylum, whence he was discharged recovered in less than a year.

A married lady, æt. 28, whose maternal aunt had suffered from so-called religious mania, had, a year and a half before my first seeing her, much anxiety and loss of rest whilst nursing her child through a long and fatal illness. Five months after this prolonged nursing, she had a difficult labour lasting, she said, three days. Three months after this labour, she contracted acute rheumatism, which laid her up for ten weeks, during part of which time she continued to suckle the baby. A nurse told her that if the rheumatism got to her heart, it would kill her. She was much impressed by this at the time, and the impression was lasting. It developed into an inciting obsession to injure herself, and a dread that she would do so (emotional obsession). She suffered from weakness, flatulence, functional palpitation, and depression. But she could throw the depression off for a time and be cheerful with her friends.

About three months before she came under my care she fancied, on looking at her baby, which was lying in bed quite well, that its throat was cut. This visual illusion haunted her. It possessed her thoughts (visional obsession), and every baby she saw had apparently had its throat cut (visual illusions). She went to Buxton, stayed six weeks, and underwent treatment by electric baths and massage without benefit. Whilst there she had three teeth extracted under gas. She had left her child at home, and she seemed, so she said, to lose her previous motherly feeling for it. Her obsessions, which had hitherto incited her to kill herself, now prompted her to destroy her child instead. This worried her much more than the previous condition.

Her symptoms when I first saw her were:—The above-mentioned visual illusions—she had seen her husband also with

his throat cut ; phrasal or inciting obsessions—vivid thoughts persuading her to cut her child's throat—to which she replied mentally as if to a second person, thus carrying on a mental conversation ; the dread (emotional obsession) and unpleasant ideas engendered by the inciting thoughts. When she saw a knife or other sharp instrument she felt a strong inclination to say aloud, "That would do," and in order to prevent herself saying it she counted, sometimes aloud. The inciting thoughts, dreads, etc., came over her at intervals "like a cloud." Asked if the conversations in her head were like "loud thoughts," she said, "Something like that." Asked about voices, she said she heard "voices," but not outside her own head. In a subsequent consultation, when under bromide, she said she heard no "voices," but that in the midst of her unpleasant reflections a strange thought would often strike in, quite foreign to her own train of thought, just as if some person were advising or tempting her to injure her child. She said these inciting thoughts, although they were in her mind, were not her own, meaning that they were not her voluntary thoughts.

There were some hysterical symptoms, *e.g.*, an attack of silly laughter and talking ; a tendency to be contradictory ; anomalies of cutaneous sensibility—tested with a pin, touch and pain seemed to be normal and equal ; the temperature sense was acute and equal, yet two sharp points were not discriminated on back of right hand at 38 mm., left 18 mm., right palm 14 mm., left 11 mm., tip of right middle finger 4 mm., left 2 mm., right side of forehead 15 mm., left 11 mm. ; beyond these distances, transversely, they were felt as two. She said she could not feel a current which a nurse at Buxton could not bear. The right hand grasp was 50, the left 40.

Bromides, glycerophosphates, hypophosphites, arsenic, Jamaica dogwood in various combinations lessened the frequency and intensity of her symptoms, and she said she felt "braver against them." She said she did not feel depressed, and that in the intervals between the "clouds" life was worth living. As she did not advance beyond this stage, total isolation from her relatives was suggested, with, as I ascertained two years afterwards, satisfactory results.

Ideal obsessions—the paræsthesiæ and paralgesiæ of the mind—are those in which an idea or belief constitutes the morbid besetment.

In a case sent to me by Dr. S. H. Shaw and reported by me in another publication (⁵) the patient, a man of neuropathic heredity who had suffered from seminal emissions, the result of masturbation, was so beset by obscene ideas that he said his thoughts "constantly revolved round" his penis. He showed no permanent improvement under any treatment, yet he was always able to follow his occupation.

Another patient, previously neurasthenic, was beset by erotic though not obscene ideas to such an extent as to diminish his business capacity. After several relapses he made a good recovery under hypophosphites, arsenic, bathing in an enclosed sea-water bath with others, and outdoor exercise. He attributed his first symptoms to fright whilst bathing in the open sea.

These cases sometimes make very sudden recoveries. A young lady who was for many months much troubled by "funny" and "queer" thoughts constantly "jumping into her head," recovered immediately after an interesting event, which took place in the home of the near relative with whom she resided, and gave her fresh occupation.

In another case the idea of non-recovery was combined with nosophobia, in the shape of fear of softening of the brain. After a duration of several months, the patient improved under tonic treatment sufficiently to commence business on her own account at a bracing seaside resort, and speedily made a good and lasting recovery.

In cases of a periodical nature these thoughts may exist, combined with nosophobia, for years and then disappear, often remaining absent for a long period; as in a case sent to me by Dr. Cregan and reported by me elsewhere, (⁶) in which the idea of non-recovery prevailed almost continuously for five years, yet vanished, with the other depressing mental and bodily symptoms, and has now continued absent nearly four years.

Emotional, affective, or phobic obsessions may constitute almost the whole disease in cases of obsessional aberration (rudimentary paranoia). They also occur as symptoms of melancholia and paranoia. Perhaps the most typical and one of the best known of these phobias is the fear of open spaces, which, in some cases at all events, proceeds from a sort of stammering of locomotion, analogous to stammering in writing, deglutition, or speech, but with much greater intensity and extent of emotion.

One mode of the pathogenesis of agoraphobia was illustrated in a case of mine already published.⁽⁷⁾ Here the syndrome was caused in a neurotic man by slight "seizures" in the street, arising from over-dosing with strychnine. The dread of repetition of these seizures and of being again stared at promoted their recurrence, and thus resulted in fear of crossing the streets and even of walking along them. He suffered from stammering writing. The pallor and subjective sensations pointed to angiospasm.

Some of these emotional obsessions, *e. g.*, thanatophobia and astraphobia, are merely exaggerations of a natural or common fear. A lady, *æt.* 69, who had recovered from an attack of melancholia, during which sudden startings and cries (probably spinal symptoms) were frequent, would, at the beginning of a thunderstorm, hide herself in a dark cellar which she was ordinarily afraid to enter.

A female patient, *æt.* 30 and married, suffered from various dreads, *e. g.*, that people, even her own child, would smother her if they came near her (a modification of anthropophobia and perhaps claustrophobia); dread of paralysis, strokes, insanity, and other diseases (nosophobia), and of death (thanatophobia); dread of going into the street (agoraphobia), so that she would stay indoors for weeks, always taking care to lock the doors after her husband went out in the morning. Her symptoms had existed more or less for ten years, but had been worse for four. At the former date she had had all her upper teeth extracted under ether, at the latter she had gone through a difficult labour lasting thirty-eight hours, and about the same time had received a severe wound on one of her wrists. To the dental operation she attributed her first symptoms, to the obstetric one and the injury, their exacerbation. She had fits of agitation at the menstrual periods, and all her symptoms were then aggravated. Latterly she had been indulging in strong tea and *vi-cocoa*.

Dietetic treatment, bromide of ammonium, and tonics relieved the urgent symptoms in a week or so, and I saw no more of her for a year. She then called and said she was just recovering from what she termed a "blue fit," in which she had a choking sensation and thought she was dying, as she fancied she had burst a blood-vessel. She was still somewhat cyanosed and said she felt the blood running all over her (angioparesis). This

occurred during a menstrual period in the first two days of which she had been unusually well. Tested with a pin the cutaneous sensibility showed no anomalies ; but the points of a pair of compasses were first felt as two beyond 35 mm. on the back of the right hand, beyond 6 mm. on the palm, 4 mm. on tip of middle finger, on back of left hand beyond 19 mm., palm 10 mm., tip of middle finger 3 mm., right side of forehead 6 mm., left 12 mm. ; in all cases transversely.

I prescribed ammonium bromide, valerian, ammonia, and gentian, with cascara tablets, and have not heard of her since.

An unmarried lady, æt. 40, of neurotic heredity and presenting degenerative stigmata, having been for some time neurasthenic, acquired a morbid dread that some evil would befall her parents. This was much intensified when she was away from them. She also felt afraid in narrow confined spaces (claustrophobia). She fancied she heard burglars in the house at night when no one else heard anything. In addition to these auditory, she had olfactory hallucinations, as well as visual illusions. Her symptoms were worse at the menstrual periods, she then becoming troublesome and violent. She finally acquired the delusion that she was being poisoned by her relatives, and her attacks of excitement became more frequent and pronounced, so that she had to be removed to an asylum, whence within a year she was discharged relieved.

A married lady, æt. 47, of neurotic heredity, four years after the menopause and fifteen after the birth of her last child, had, in addition to various neurasthenic and climacteric symptoms, a constant great dread of some vague danger and a fear of walking alone in the street, lest she should fall or have one of her so-called "fits" of numbness and weakness of the whole of one side (probably vaso-motor).

Perchloride of iron with sodium bromide and mag. sulph., in addition to out-door life free from fatigue, together with some extra rest in bed, and the deletion of strong tea from the dietary gave much relief.

Fear of railway travelling (siderodromophobia) and fear of precipices (cremophobia) were presented by the second case under the head of phrasal obsessions.

Visional obsessions are exemplified in the case of obsidional aberration with verbal obsessions already mentioned. The

patient said that when he looked at anything he could not get the image of it out of his mind.

In the third case of phrasal obsessions reported here the patient was beset by the vivid thought or mental image of a child with its throat cut when the visual illusion, the immediate cause of the obsession, was itself not present.

The above classification is not quite logical and may have other imperfections, but the divisions will perhaps serve to pigeon-hole most of the many and various cases which come under no heading so well as that of obsessions. Some of the phrasal obsessions will perhaps be looked upon as instances rather of pseudo-hallucinations—Baillarger's psychical hallucinations—than of obsessions. At first I thought they were psychical hallucinations, but on closely interrogating the patients I was convinced that, except during exacerbations, these phenomena could not be regarded as even pseudo-hallucinations without much perversion of the usually accepted meaning of the term hallucination.

The dictum that obsessions originate exclusively in the associative centres and psycho-sensory hallucinations in the sensory can hardly be maintained. It does not seem to hold in the common "catchy refrain" obsession, or where there are those auditory hallucinations in which the patient, to his surprise, hears total strangers not only repeat conversations which have taken place in his own home, but discuss events which have occurred there.

The symptoms most akin to or resembling obsessions are impulses, psychical or psycho-motor hallucinations, and delusions as to matters of faith. Those obsessions which only arise under certain circumstances, *e. g.*, agoraphobia, mysophobia, astraphobia, are perhaps most akin to such an impulse as that which causes persons to throw themselves from lofty structures or heights, and the less common one to use a weapon on a man who happens to be near it. But in obsessions the fear or dread is the motive of any action that may take place, whereas in impulses the dread, if there is any, is lest the suggested deed should be accomplished.

Although Magnan's definition of an impulse, *i. e.*, a morbid impulse, has been adversely criticised on the ground that the impulse should always include the act, it seems to me that his definition,⁽⁸⁾ "A mode of cerebral activity which impels to

acts which the will is *sometimes* powerless to prevent," meets the case better than any other.

The morbid impulse may follow the phrasal obsession, or it may arise suddenly from a physical or mental immediate cause as a sort of cerebral reflex without the intervention of an obsession; it may culminate in the imperative act, or it may not; but the obsession, the impulse, and the act are distinct and separate. Such minor quasi-physiological phenomena as the irresistible or almost irresistible tendencies to count, touch, remove, drop, or lift various objects are rather obsidional impulses than obsessions.

Responsibility is manifestly less in the reflex or quasi-reflex impulses than in those which are preceded by phrasal obsessions as their immediate cause. When the former impulses are strong enough to overpower the will there is no interval for thought as in the impulses arising directly out of obsessions. The patient, whose case is the second reported under the head of phrasal obsessions, was always at his worst when these reflex impulses were most in evidence.

That phrasal obsessions are totally different from verbal psycho-motor hallucinations a few examples will show. Marie⁽⁹⁾ reports three good cases in which the patient either thought he himself spoke against his will, or that others borrowed his voice and spoke through his mouth. Marie refers to another patient whose persecutors made him talk against his will. Sérieux⁽¹⁰⁾ also records a case in which the patient thought she spoke in her own throat and called herself "thief," and another⁽¹¹⁾ in which the patient heard people speaking in her mouth.

These phenomena are such as might be expected from excitation of the nervous elements which retain the motor residua of speech in the inferior frontal cortex, if excitation of those elements is capable of producing hallucinatory phenomena at all. I venture to think, however, that many so-called psycho-motor hallucinations are merely psycho-sensory, located by the patient in some part of his body. But the verbal and phrasal obsessions appear to be due to mild erethism of a few of the elements of the sensory word centre in the temporal region. In the third case under the head of phrasal obsessions the inciting thought first sprang into the patient's mind and was followed by the tendency to utter it—a tendency which the patient checked by counting, sometimes aloud. In verbal

psycho-motor hallucinations or in any phenomena resulting from erethism of the posterior part of the inferior frontal cortex, speech, or the sensation of having spoken would be primary.

That these phrasal obsessions, due probably to mild erethism of isolated groups of psycho-sensory, and never, I venture to think, psycho-motor cortical elements, may, during exacerbations, become so intensified as to be described as "loud thoughts" or even "voices in the head," and to that extent become psychical hallucinations, is apparent from the cases reported under the head of phrasal obsessions. But the patients had never any doubt as to the subjective nature of the phenomena. They felt as if their thoughts had got out of hand, and they were ashamed of their nature, and half inclined to repudiate them.

It is quite conceivable that still more intense erethism, with perhaps some implication of elements belonging to a lower sensory level, would produce the effect of external sounds and so give rise to true psycho-sensory hallucinations, those called by the patients "communications" or "commands." Verbal obsessions may be a rudimentary stage of psycho-sensory hallucinations of foul epithets and be capable of development by intensification and downward extension. I cannot say, however, that I have yet seen these transformations.

Delusions as to matters of fact cannot be confounded with obsessions, but certain so-called delusions as to matters of faith, fixed ideas, only differ from such obsessions as nosophobia and belief in non-recovery in that the patient is capable, in his best moods, of being reasoned, temporarily at least, out of the latter. But during exacerbations the obsession differs no more from the faith delusion, *e. g.*, the soul being lost, than the fact delusion that the subject is a giant differs from the fact delusion that he is the Creator. If the incorporation of the morbid idea with the ego is the only diagnostic criterion between obsessions and delusions then is the difference in many cases merely one of degree. On the other hand, morbid fixed ideas as to matters of faith, so-called delusions, are often, as in some of the cases here reported, associated with symptoms which are markedly obsidional.

Neuropathic heredity and neurotic constitution are almost invariably factors in the etiology. A sexual element in some form or other is nearly always present, and often there is a

history of exhausting illness, prolonged vigils, fright or other emotional shock, or some striking utterance.

A condition of mental or nervous exhaustion is not by any means always a factor in the etiology. A medical man, æt. over 70, able, energetic, unselfish, by no means neurasthenic, is beset by the idea or dread that it might be thought his father, a fiery-tempered man who died of coarse brain disease supervening on morbus Brightii, was insane. Periodically he requires reassuring, and although he is fairly easily reassured, anything in the shape of an example or illustration only leads to further questionings. In replying to the lengthy communications in these cases, brevity is indeed the soul of wit.

There seems at times to be a toxic element in the etiology or in the development and transformation of symptoms, as in the case of obsession of salicylic origin already mentioned. A small, pale, nervous-looking man, æt. 22, suffered from various obsessions, *e.g.*, sudden apprehensions that something, even fatal, might happen to him, wondering if he was really in the place where he actually was, wondering for an instant if he was really talking to the person to whom he was actually talking, fear that he could not get up from a chair on which he was sitting although he said he knew he could get up if he tried, sense of impending suffocation in the early morning. This last sensation was relieved by alcohol first taken to excess some years previously to counteract an attack of anthropophobia which had prevented him going out of doors for three months. The alcohol relieved the anthropophobia and the choking sensation, but induced the apprehensive wondering state above described, together with clutching sensations at the back of the neck, and a state of general fidgety restlessness. In addition to alcohol he was taking a concoction of coca, kola, etc., described as cocoa.

Some of the symptoms would seem to point to a vaso-motor factor in the pathogenesis, as well as to erethism of isolated groups of neurons or whatever else the nervous elements may ultimately prove to be. In some of the cases, the association of verbal or phrasal, manual and visual symptoms suggests the affection more especially of the cortex round the Sylvian fissure, and of the angular gyrus or the occipital lobe.

Psychologically a species of devolution or dissolution appears to take place, the highest and last evolved form of control, that of

the thoughts and emotions, being the first to be lost, then the control of the actions, and finally, if the case proceeds, more or less blurring of consciousness.

During exacerbations in cases where the obsessions are essential or in the later stages of cases in which they are merely symptomatic the phrasal obsessions approach a lower level—psychical hallucinations; dreams are prolonged into hypnogogic hallucinations; mere passing doubts and dreads become fixed and incorporated with the ego; attention and memory are weakened.

There is in some cases a state of puerility, and in *folie du doute* the interrogative condition of the mind often resembles, so far as certain matters are concerned, that of an inquisitive boy of four or five years of age. In other cases again, the doubts and dreads indicate a state of pusillanimity more or less extreme.

Therefore, where they can be carried out, therapeutic measures directed to the removal of the cause, to the correction of the vaso-motor defects, and to the subduing of the neuronic erethism, combined with a form of re-education suited to each patient individually, would seem, at present, to offer the best chance of amelioration or cure.

Hypnotism might, under favourable circumstances, fulfil some of the indications, where the obsessions are not too importunate or are at times in abeyance. It is most likely to be useful in those cases in which it is applied under circumstances necessarily excluding the obsession, as in agoraphobia, for example. My own experience of it has not hitherto been very favourable, but the cases were experimented on as a sort of *dernier ressort* and were necessarily bad, viz., severe cases of phrasal obsessions and of nosophobia.

It might be worth while to mention here the case of a neurotic youth, æt. 21, who was beset by the not uncommon idea, almost amounting to a delusion, that he had seminal emissions every night. Hypnotism and various drugs had not the slightest beneficial effect. But after a year's associated outdoor and indoor exercises with general hygienic measures he appears now to be on the fair way to recovery.

(¹) *Ann. med.-psychol.*, Mar.—Avr., 1896, quoted by V. Bourdin.—(²) *Lancet*, April 20th, 1901.—(³) *Ann. med.-psychol.*, Mar.—Avr., 1896.—(⁴) *Lancet*, August 9th, 1902.—(⁵) *Med. Ann.*, 1902.—(⁶) *Ibid.*, 1902.—(⁷) *Ibid.*, 1902.—(⁸) *Ann. med.-psychol.*, Mar.—Avr., 1896, quoted by V. Bourdin.—(⁹) *Journ. Ment. Path.*, June, 1901.—(¹⁰) *Ibid.*, July, 1901.—(¹¹) *Arch. de Neurol.*, 1894.

On the Use of Caution Cards in Asylums. By J. MARNAN,
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FOR a considerable period before the now practically universal system of caution cards was adopted in our asylums, other methods had to be resorted to in order that special attention should be given to suicidal patients. In the earlier established asylums, when the various duties, clerical and otherwise, of both medical officers and attendants were less mapped out for them, when, in addition, the number of patients was very much less, the then existing verbal caution was in general use, and was considered fairly efficient.

As a result both the medical staff and attendants acted to a much greater extent on their own initiative. But our asylums rapidly increased in size, the accumulation of chronic patients did not perhaps overshadow the acute to such an extent as formerly, and it was found that suicidal attempts were happening in larger relative numbers than was considered allowable by the Commissioners.

Tracing their reports through the various Blue-books, we find, as early as 1867, mention made of insufficient notice being given to attendants regarding the suicidal tendencies of patients entrusted to their care. This apparently producing no alteration, we find in the Blue-book for 1870 that "notice of the alleged suicidal tendency of a patient should not only be given in writing to the attendants first taking charge of him, but that this paper should accompany or follow him in every instance of removal from one ward to another, so long as he might remain in the asylum, however marked the supposed mental improvement might meanwhile have been." This was the first indication of the forthcoming caution card, and we are unable to trace any further direct reference to its adoption until five years afterwards, when in 1875 the Commissioners felt themselves obliged to make stringent representations as to the need for adopting a system of written instructions, which should be the means of more directly fixing the responsibility and ensuring unremitting supervision.

To quote from their report, "It consists in the filling up of a form, stating that attempts at self-destruction are likely to be made, and, where practicable, indicating the means likely to be employed. This form is cut from a book in which a counter-

foil remains. It should be printed on parchment, should be passed with the patient from ward to ward, and ultimately filed for reference."

In the years 1881 and 1883 we find suggestions and recommendations as to the adoption of a special card for suicidal patients, and as lately as 1890 we notice recommendations as to the form of caution card the Commissioners consider most suitable, and this more than twenty years after they had been first suggested. But as to the system which should be adopted, the Commissioners very wisely contented themselves by laying recommendations on formal lines, no particular form being prescribed. As a result there is to be found an astonishing diversity of caution cards in various asylums, when it is considered that the object of and the directions contained in the wording should be perfectly simple and concise.

It has occurred to us for some time that, though there is undoubtedly a use, there may be an abuse of the caution card, and there are several points in connection with them which have been brought out by answers to our inquiries, most kindly given by a large number of superintendents.

The first question was as to the date of the adoption of a caution card. Looking over our replies, we find 1879 as the earliest date given, and from that time until as lately as 1896 there has been a steady increase in the number of asylums adopting the system. However, strong as the recommendations of the Commissioners were, it was with a great amount of reluctance that the new customs were established. This is evident from the fact that the greatest number of asylums determined to give the system a trial in the years 1888 and 1889, or more than twenty years after the necessity for written instructions was mentioned in the Blue-book.

The second question was as to the means previously taken to warn attendants. In almost every case verbal instruction was solely depended on, though in a certain number an attempt was made to impress the attendant with the full significance of the caution by marking the ordinary admission form "suicidal." Before passing from this question it is interesting to note that we have received several expressions of opinion from asylums in England and Ireland to the effect that they would have much preferred to have continued under their old method of verbal caution only.

One superintendent writes, "My own opinion of now over thirty years has brought me to the conclusion that, to prevent suicides and casualties, what is most needful is a thorough knowledge of the personalities of the patient, and a daily review of them. Much more safety is got by this and verbal instructions than by any system of caution cards. I issue cautions in extreme cases only."

Another says, "In my opinion these cards are of little or no use. Verbal instruction is the most perfect way of all."

The following opinion is most emphatic:—"I am glad to reply 'Thank God, never,' to the first query. In this asylum we humbly do our best to teach our attendants their duties, one of which is to look after suicidal patients. The system of caution cards is, in my opinion, pernicious, both from a medical and from an administrative point of view. It is also unfair and absurd, as I think, to fix responsibilities upon our attendants which we would not take upon ourselves."

We are aware that caution cards are still not compulsory in Scotland. The system of verbal instruction exists there to-day just as it did in England thirty years ago.

Here is the *modus operandi* of a Scotch asylum as given by the medical superintendent:—"When a patient is admitted the charge nurse is given a *résumé* of the case, and if in the opinion of the physician the case is suicidal, the nurse is told so. In the same way homicidal tendencies are indicated. I have never used caution cards in my fourteen years' experience, and do not think they are in general use in Scotland. Why they should be regarded as essential in one country and not in another I do not know. The Scotch Commissioners do not insist on them. The Scotch asylums are smaller, and the number of patients to each medical officer fewer. Some say English patients are worse than Scotch, but the system of boarding out harmless patients means that, of those in asylums, more in proportion are acute, and the cards would seem to be more required."

We quote these opinions merely from the point of view of their interest, and most interesting they undoubtedly are, since they emanate from men whose years of experience entitle them to our greatest respect.

Caution cards have been in use in Bristol Asylum for many years, and there is no likelihood or wish for their discontinua-

ance, seeing as we do their advantages, and appreciating the many good points which they have when properly employed. In such Scotch asylums as have adopted them, the system does not differ from our own.

The third question was, "What is the form of caution card used in your asylum?" In reply we received about forty specimen cards, of which no two were exactly alike, each superintendent having his own particular idea as to how the watchfulness of the attendant can best be ensured. The specimens were of many shapes, sizes, and colours, three only out of the entire number being of parchment, notwithstanding the Commissioners' suggestion to that effect. With regard to the printed matter, some were brief and to the point, but in many cases the instructions were anything but simply worded, and given at greater length than necessary.

Now the leading feature of a caution card should be its simplicity and brevity. We wish to inform our attendant that a certain patient is suicidal and must not be lost sight of for a moment. If we add the means by which he has already attempted the act, to give the case some distinguishing characteristics, and by so doing impress our attendant with a fuller sense of his responsibility, our caution card is complete. An elaborate card with numerous directions, couched in terms the meaning of which cannot be at once grasped, conduces to carelessness, and will probably be signed unread.

Some issue two cards—one for the actively suicidal, the other for the suspected cases. In our opinion one card answers the purpose. We do not expect our attendants, improved though they undoubtedly are, to discriminate between the two classes as regards the amount of supervision to be exercised; and, as previously stated, we do not issue a caution card to suspects, but only in extreme cases. When we are compelled to do so the case is treated to all intents and purposes as actively suicidal.

Questions Nos. 4 and 5 inquired whether the caution cards were issued to homicidal and suspected cases in addition to the actively suicidal. As might be expected, many are the views held on these points by different superintendents. Here we find caution cards issued in extreme cases only; here, again, suspected cases swell the number; while others include homicidal and escape cases also.

In the Bristol Asylum we make it a rule that unless we get

a definite history of a determined attempt, that patient is not placed upon a caution card. There may be occasional instances when, after conversation with a newly admitted case, we decide in our own mind that he is not to be trusted, and accordingly issue a caution card; but, generally speaking, we are loth to do so with regard to any patient who has merely expressed the intention, realising as we do that in the interests of the patient something should be risked, if necessary, in order that he may more quickly develop self-control, which the feeling of restraint necessitated by the use of the caution card is often too irritating to allow.

The sixth question was, "What percentage of your inmates are on caution cards?" The replies to this give an average of 3·6 *per cent.*, the lowest being 0·4 *per cent.*, and the highest 10 *per cent.* We naturally expect to find the greatest number in those asylums where it is deemed advisable to include homicides and suspects in the suicidal list, but although this must make the number larger we must remember that the class of patients varies in different places. Possibly, owing to greater stress of circumstances, such as exists in some parts of the country, those asylums would appear to receive more than their just share of the suicidal class. Even in the same asylum the number is ever varying, and the change is still more noticeable when we compare different institutions.

The seventh and eighth questions had reference to the distribution of the suicidal patients. The general tendency appears to be in favour of distribution throughout the building, such authorities as insist on this doing so because they are of opinion that the chance of recovery of the patient who forms one of a large group of similar cases is materially lessened. Others, however, prefer to hold the view that the supervision is more adequate when the suicidal patients are collected in one or two wards. We hold the latter view, and have done so for a number of years.

It is one of the rules in certain asylums that the actively suicidal cases shall be kept in bed until the acute symptoms have passed off. When by keeping the patient in bed we mean sending him to the infirmary ward, this plan is not devoid of good points. Such a patient can be kept under constant supervision, and at the same time free from the feeling that he is being watched.

The ninth question was, "What arrangements are made for bringing caution cards under the immediate supervision of the night attendant?" Here, again, we find numerous methods employed to achieve the same end. Some superintendents insist that the suicidal card shall accompany the patient to the dormitory nightly, where it is handed over to the night attendant and eventually signed by him. In most instances the nightly signature is dispensed with. Others prefer to rely upon a night report-book, in which is inserted the names of the suicidal patients, and this book receives the signature. As an additional precaution it may be the custom to note hourly whether the patient is asleep or awake. Quite a number of asylums issue two cards in respect of each patient, one each for the day and night attendant.

In the Bristol Asylum we do not consider it necessary to employ any of the foregoing methods. When a markedly suicidal patient is admitted a caution card is issued, and is handed by the head attendant to the charge attendant of the ward. The patient is then placed in bed, where, like all fresh cases, he remains during that day. This night only his caution card accompanies him to the dormitory, and both patient and card are entrusted to the care of the night attendant. The night attendant signs the caution card, and before taking over charge of the dormitory he has to satisfy himself that he is acquainted with all his suicidal cases. In addition, this card is signed by all the other night attendants, so that in the event of one relieving another each one becomes responsible in turn.

We sleep our suicides mostly in the same dormitory, practically in a row, and near the attendant's chair. They are, as a consequence, thoroughly under observation. Should anything occur to call him away from their immediate neighbourhood, although busy elsewhere, he can always watch from a distance that particular part where most of his observation is needed. Such cases as do not sleep in this dormitory, probably owing to bodily as well as mental infirmity, are located in the infirmary ward, where exactly similar rules are obeyed. With a trustworthy attendant we find this method most satisfactory and in every way adequate.

The tenth and final question was, "How often are the caution cards inspected, and under what conditions are they discontinued?" Looking over the varied replies to this, the most

important question of all, we find the following :—"Every three weeks," "weekly," "every fortnight," "monthly," "every two or three months," "frequently," "at uncertain intervals." Judging from the total replies, the favourite periods are weekly and monthly.

We consider once a month a reasonable time for systematic inspection, and accordingly inspect our caution cards monthly as a routine, though in the intervals between two such inspections we frequently review the list with a view to lessening the number whenever opportunity offers.

As regards the second part of the question, we must own that it does not admit of a very definite reply, because no two of the cases are exactly alike, and each must be judged on its merits. Consequently we consider it of the utmost importance that each case should be watched individually as far as possible. The less the number of caution cards, the more easily can this be done. We notice that the cancelling of the caution cards is often left to the discretion of the medical officer in charge of the case, but we are of opinion that no card should be discontinued without consultation with the medical superintendent, who is more competent to express an opinion in difficult matters of this kind.

Briefly speaking, the chief advantages of the caution-card system are :—Firstly, the cases are thereby focalised to both assistant medical officer and attendant ; reviewing suicidal patients is a simple matter under these circumstances. Secondly, the grouping of cases under supervision renders a less number of attendants necessary ; this is important, as we consider that none but most trustworthy attendants should be placed in charge of suicidal patients. Thirdly, the focalising and grouping of the cases are a guarantee that they will individually receive special attention.

We might mention a few disadvantages :—Firstly, the grouping of inharmonious cases, almost always necessary to some extent, however much we may endeavour to avoid it, the effect of which may be depressing and deteriorating. Secondly, the routine management of the patient by both medical officer and attendant—a tendency, as it were, to look upon the patient as a caution-card case and nothing more. With the knowledge that every suicidal case is in charge of an attendant who has signed himself responsible, it is unfortunately a by no means

difficult matter to unintentionally, though none the less effectually, neglect these cases. The attendant, for his part, is prone to develop haphazard and mechanical methods. Thirdly, the unfortunate tendency to prolong the period of special supervision.

It is a very simple matter to issue a caution card and by so doing relieve ourselves of all responsibility, but we should also bear in mind that the situation presents a far more serious aspect when we come to consider the advisability of removing his name therefrom.

In conclusion, we would add that the labelling and segregating of patients, when prolonged unnecessarily, is more suggestive of suicide than recovery. It is most important that the strain of constant supervision should be relaxed at the earliest opportunity, and with this end in view the suicidal cards should be regularly inspected; the attendant in charge frequently consulted as to the general conduct of the patient; any mental improvement, however slight, noted; the attention of the attendant called to the same, and every effort made to interest him in his work. Given a moderately intelligent class of attendant—and we are thankful to say such a class does now exist,—the views of those who see more of the patients than the most assiduous medical officer will go a long way towards helping us to acquire a more thorough knowledge of our charges. The longer we allow a patient's name to remain on the caution-card list, the more difficult will it become for us to remove him from its influence—an influence which, as before stated, in time becomes both irritating and deteriorating.

Even as lately as 1902 the Commissioners found it necessary to dwell on the importance of “a frequent revision of the list, and when properly possible a reduction of the number, as desirable in the interest of attendants and patients.”

DISCUSSION

At the Meeting of the South-Western Division, November 3rd, 1903.

Dr. MILLER was inclined to think that they must acknowledge to their sorrow that the very existence of the caution card showed the terrible weakness in their administration. The very able way in which Dr. Marnan had entered into the history of the caution card rather demonstrated that fact. Unfortunately, in this country they were obliged to protect themselves, so to speak, by having these caution cards, but the less obtrusive the card was the better, and the limit of its use ought to be as close as possible. He failed to see how it would be possible in any asylum, unless staffed in an extraordinary way, to put 10 *per cent.* of the patients under continuous supervision. He thought they were apt, by the use of

the caution card, to deter a possible improvement in the condition of the patients. To congregate a number of patients in one ward might be all very well for the happiness of the staff, but absolutely wrong for the treatment of the patient. To regard the question from the point of view of economy was wrong, and he contended that they ought to try to find out that system of treatment best calculated to cure the disease.

Dr. STEWART said that the idea Dr. Miller had suggested was a very practical one, and one which commended itself very much to all of them who were anxious that the feelings of the patients should have every consideration. He believed with him that the association of all suicidal patients in one room for the purpose of having them under special observation was a faulty arrangement, and might retard convalescence.

Dr. ALDRIDGE said that in discussing any particular form of treatment it was usual to contrast the results obtained under that treatment with those obtained before such treatment was instituted, and in the matter under discussion it would be interesting to know if there was any diminution in the number of suicides during the time the caution cards had been in use, and whether less or more suicides had occurred where a more stringent use of the cards obtained.

Dr. MACDONALD said that the point raised by Dr. Aldridge was perhaps the crux of the whole matter. Had caution cards reduced the number of suicides? A careful perusal of the Commissioners' Blue-books did not prove that the use of caution cards had reduced the number of suicides. For the year 1902 there was one suicide to every four thousand patients in the public asylums of this country. This proportion has varied considerably during the past thirty years—the average for thirty-one years being one suicide to every five and a half thousand patients. He was of opinion that these caution cards should not be used for any other class of case than the actively suicidal, and then only after mature consideration. He was not sure these caution cards were of the value Dr. Marnan would have them believe in the prevention of regrettable accidents. Such had not been his experience. He would not deny that they had nurses and attendants to whom these cards might be a help, but what he disliked was this mechanical method of inducing nurses to do their duty. If asked not to lose sight of the patient, the nurse should be trusted to carry out the order, and not be openly assured of the distrust surrounding her by having to sign a special card. He was inclined to think the more they brought into the daily life of these institutions the idea of mechanical checks and aids, the more they rendered the individual a mere piece of artificial mechanism, and the less apparent was that mutual healthy trust and confidence without which we were indeed poverty-stricken. Our aim should be to raise the standard of individual responsibility among the members of our staff, and this, he said, could only be done by a free and untrammelled system of inspired trust and confidence.

Dr. SOUTAR said that caution cards were undoubtedly of great value in preventing preventable suicides. It was well known that from time to time suicides which no foresight could prevent occurred in asylums. They could not read what was going on in the minds of patients, and it sometimes happened that when to all appearance that stage of improvement had been reached which in the patient's best interests indicated a relaxation of restrictions, a long-concealed suicidal intention was carried out. For such accidents as these they were not blamed. It was one of the justifiable risks they must run in guiding a patient back to health. What they would rightly be blamed for would be for omitting to take every precaution against suicide in the case of those patients who were known to have, or might reasonably be suspected to have, a suicidal tendency. He thought that in those cases specially written directions should be given to the attendants, and that for the comparatively limited number of actively suicidal patients caution cards should be issued. He maintained that this imposing of definite instructions on attendants should not be regarded as a shifting of responsibility from their superiors, but rather as a means of securing co-operative action on the part of all concerned in the treatment of the patient. As far as one could judge from Dr. Marnan's paper, the great majority of asylum superintendents were agreed on the general principle that the issuing of special directions in suicidal cases was necessary. The practical value and great interest of the paper lay in the summary he had made of the practice of others, and in his statement as to how suicidal

cases were dealt with in the asylum with which he was connected. There was agreement in principle, with variations in the methods of applying it. The purpose in view was to secure the safety of the patient, and to assist the attendants—as definite instructions did assist them—in the discharge of their duty. He (Dr. Soutar) said that he divided suicidal cases into three classes:—First, those patients who had not developed, but from the type of their mental disorder might possibly develop, suicidal tendencies. The names of those patients were written in red ink on the charge attendant's list. These were cases for observation on the part of attendants, who, constantly associating with the patients, would from close observation be able to assist the medical officer in arriving at a decision as to whether the patient should or should not remain on the suicidal list. He valued highly the assistance of observant attendants in this class of case. Second, those patients who were definitely suicidal—perhaps had made an attempt at suicide, and would under favouring circumstances attempt it again. These patients must never be away from observation by day or night, and must be specially guarded from temptations which suggest, or opportunities which facilitate, the suicidal act. For these patients there is issued a red card, which is signed by all attendants on day and night duty who have anything to do with the case. Third, this class is fortunately a small one. It consisted of those patients whose insanity showed itself in a determination to die. They generally showed very little emotional disturbance, they revealed no delusions, and they were generally intelligent and often seemingly interested in all the ordinary pursuits of life; yet their purpose was suicide. They were ever seeking opportunity to effect this purpose, and their ingenuity in discovering the opportunity could be believed only by those who had charge of them. A patient of this type required to have a special attendant close to her at all times by day and night. These patients were generally women. In these cases he issued a blue card warning the attendant of the condition of the patient. The attendant while in charge of the patient had this card in her possession; she had no other duty, and until the card was handed over to another attendant her responsibility continued. As a general rule the obtrusive watching of patients should be avoided, and the tactful attendant would do his duty without aggressiveness; but in the last class of cases there should be no hesitation in telling the patient what the restrictions were and why they were imposed. The frequent revision of the suicidal list was most important, but when to withdraw a blue card was one of the most difficult and responsible of duties.

Dr. AVELINE asked if the caution cards might not be defended on the ground that written instructions were very much better in evidence than verbal instructions. It would have been interesting if Dr. Marnan could have given them any statistics with regard to the value of the caution cards.

Dr. BENHAM said he was practically in entire agreement with the paper read by Dr. Marnan, and also with the remarks of Dr. Soutar. The method he had sketched out was, in his opinion, admirable. It had been suggested that to segregate patients in particular wards very much retarded recovery and inflicted pain upon them, but that had not been his experience. He had no hesitation in telling the patients they were under suspicion. In his asylum they had one ward in which there were twelve suicidal patients under caution cards, and he did not think they suffered because they were thus segregated, or that the nurses suffered from the strain.

Dr. MARNAN briefly replied to the discussion.

On the Experimental Use of Antiserums in Acute Insanity. By LEWIS C. BRUCE, M.D. Edin.

DURING the past year we have frequently used antiserums experimentally in cases of acute insanity because we have been led to believe from our observations that many of these cases,

either primarily or secondarily, are suffering from bacterial infection. The grounds upon which we base this belief are that we frequently find hyperleucocytosis, and in forty-eight out of seventy-six cases examined we have found bacterial agglutinines in the blood which do not exist in the blood of healthy people.

The serums which we have used are antistreptococcus serum, antistaphylococcus serum, antibacillus-coli serum, made at the Wellcome Laboratory. We have also used serum made in the Murthly Laboratory from goats—one being immunised to an organism obtained from the blood of a case of acute katatonia, and one being immunised with the organism isolated from cases of general paralysis by Ford Robertson, McRae, and Jeffries. The latter serum has only been used in the treatment of cases of general paralysis, and we do not intend to make any further mention of it in this communication.

In a paper published by one of us in the *Journal of Mental Science* for July, 1903, it was noted that in four cases of acute mania treated with antistreptococcus serum no results were obtained by subcutaneous injection, but that by oral administration three out of the four cases benefited by the treatment. Further observations made on thirteen cases have confirmed the opinion that subcutaneous injection of antibodies in acute mental disease are, so far, of no value even in cases where a definite agglutinine was discovered in the blood of the patient and the appropriate antibody injected.

A further experience of oral administration, however, has also confirmed the earlier observations as to the effect of these antibodies on the pulse and temperature.

In five fully developed cases of acute mania antistreptococcus serum was given in doses ranging from 10 to 20 c.c. without benefit, and we are of the opinion that in any case of acute mental disease where the symptoms are severe serum treatment is of no value. In two cases, however, which threatened to relapse 10-c.c. doses of antistreptococcus serum reduced the pulse ten to twelve beats per minute, lowered the temperature a degree, and apparently cut short the attack. Two further cases of mania which had recovered to a certain point, but showed every evening a tendency to loss of self-control with a quick pulse and slight rise of temperature, were treated with 10-c.c. doses of antistreptococcus serum, given at 4.30 p.m., to

anticipate the rise of pulse and temperature. Both patients undoubtedly benefited by the treatment: their pulses did not show the evening rise, there was less restlessness, and both made rapid and excellent recoveries. That the action of the serum in these cases was not specific is shown by the fact that some evenings antibacillus-coli and antistaphylococcus serums were administered instead of antistreptococcus serum, and yet the effect upon the temperature and pulse was marked. Three cases of katatonia were treated with large doses of a serum made in the Murthly Laboratory, obtained from a goat immunised to a coccus isolated from the blood of a case of katatonia. In all three patients the serum produced a very marked fall in temperature, but there was no mental improvement. A further point which we have noted is that these antibodies, when exhibited by the mouth, have a distinct hypnotic action; at least 50 *per cent.* of our cases have shown this action, not once, but repeatedly after the administration of the serum. This hypnotic action of antisera has been previously recorded in medical literature, but I have not been able to find the reference.

DISCUSSION

At the Meeting of the Scottish Division at Edinburgh, November 27th, 1903.

Dr. FORD ROBERTSON remarked that Dr. Bruce had only described his observations, and had not endeavoured to give any interpretation of their results in the light of the modern knowledge of immunity. It was therefore hardly possible to discuss the paper, though many debatable questions were raised in it. For example, it might be contended that as there were many varieties of streptococci, a negative result on treating a patient with a simple antistreptococcic serum could not be regarded as excluding the occurrence of a toxæmia of streptococcal origin. The most potent antistreptococcic serum was now found to be one in the preparation of which several varieties of streptococci had been used, such as that prepared at the Pasteur Institute in Paris. It might also be objected that it was still rather doubtful if it was possible to obtain a specific antistaphylococcic serum. He did not mean, however, by these remarks to endeavour in any way to minimise the importance of Dr. Bruce's researches. He was sure that the observations were of great importance, and though results such as those obtained might as yet be incapable of full interpretation, their significance would probably become apparent as our knowledge of immunity advanced.

Dr. BRUCE.—I am much obliged to you for your criticism. The record of the uses of serum was merely a record stating that it had been used, and that the results were so and so. That apparently injected subcutaneously, even in appropriate cases the serum produced no result. Dr. Ford Robertson's criticism is quite correct as to antistreptococcic serum—there are so many varieties of streptococci. What I used was the serum, which we may call the commercial serum, prepared by Messrs. Burroughs and Wellcome, and sold now by all the big firms. I fancy they do make it from several varieties of streptococci. The curious thing to me was this, that you got the same results from various serums when given by the mouth. Now, what is the explanation of that fact?

Dr. FORD ROBERTSON.—You produce a leucocytosis.

Dr. Bruce.—No, you produce no leucocytosis. It reduces the pulse and temperature. What is it you are introducing into the body? Is it the immune body? Is the patient deficient in the complement and unable to prepare his own antitoxin? It was merely with the idea of getting some suggestions as to this that I brought the question forward.

The Trypanosoma of Sleeping Sickness. By ROBERT JONES, M.D.

BY the courtesy of Sir Patrick Manson, K.C.M.G., I am permitted to show you specimens of (1) the trypanosoma from the human subject, an European, which is the first instance of such a discovery; (2) in monkey got by injecting human trypanosomes, the specimen being one, I believe, of Dr. Castellani's own preparation; and (3) the Tryp. Lewisi from the sewer rat. I make no apology for drawing attention to the possible cause of a disease—sleeping sickness—which is so nearly allied in its clinical symptoms to the condition of katatonia or hebephrenia, two of the varieties of dementia præcox which, in increasing numbers, many of us are called upon to treat. Recently my colleagues and myself have made an unsuccessful attempt at lumbar puncture in order to have examined the cerebro-spinal fluid of a case of katatonia. Let us briefly contrast the trypanosoma with the malaria parasite.

Less than ten years ago nothing really was definitely known of malarial parasites outside the human body. Now the extra-corporeal life is fully ascertained, and the co-existence of malaria with the anopheles mosquito has been fully investigated.

Briefly, the malaria parasite or the *Plasmodium malariae* has two phases, or a dual cycle, an intra-corporeal and an extra-corporeal life.

To take the varieties of malaria, viz., *tertian*, in which the *plasmodium* matures and discharges itself from a red blood corpuscle in forty-eight hours; the *quartan*, in which the same takes seventy-two hours, and the *Æstivo-autumnal*, also a forty-eight hours' maturity. In all these (1) after a chill, the red blood-cells contain highly refractile and actively amœboid small bodies, which are the early forms of the plasmodium and are

called *Merozoites*, which form a small ring around a central clear space ; (2) some hours later granules of pigment appear in these forms, and the pigment granules are motile ; (3) at intervals, for forty-eight hours, these plasmodia occupy the whole of the red blood corpuscles, which are pale, owing to the destruction of the hæmoglobin ; (4) in forty-eight hours all amœboid movements cease, and the nuclei, of the segmenting mature forms, become visible ; (5) finally, the cell bursts, an infinitesimal number of small merozoites—each with a nucleus—is set free to enter other blood-cells. These again mature in forty-eight hours and discharge themselves, once more to re-enact the cycle. This process describes one cycle only.

Co-existing with these granular forms are crescent-shaped bodies with pigmented centres, but without amœboid movements. These bodies have sexual capabilities, that is to say they have the power to prolong and perpetuate the species in a cycle outside the human body. They do not segment into *merozoites* but remain circulating in the blood. When out of the blood some of the forms ex-flagellate, *i.e.*, throw out and eventually set free a long *flagellum* which enters other cells.

Each flagellum contains some of the nuclear chromatin of the organism from which it arose. This flagellar chromatin unites with the chromatin of the cell into which it entered.

The result of this union is a *zygote*, which divides into *zygotomeres*, and the formation of *zygotoblasts* or *sporozoites*.

This process was observed to take place within the body of a special kind of mosquito—the anopheles. No other fly is known to act as *host* to the *plasmodium*.

After some time within the mosquito, the sporozoites find their way into the salivary gland and into man, in whose blood the sporozoites either become the amœboid forms or the *merozoites*. The crescents may develop either within the mosquito or elsewhere *outside the body*.

Two types of cells develop in the sexual cycle, the male cell, called the *micro-gametocyte*, out of which grow flagella, called the *micro-gametes*. These enter the other larger cell—the female—called the *macro-gamete*. All these enter, grow and mature in the red blood corpuscles, and are *endo-globular*. When quinine is administered it destroys first of all the amœboid forms, the sexual form being more resistive.

The special feature of malaria is that the *plasmodium* has two

cycles, one of which is completed in the body of the mosquito. Not so with *Trypanosomiasis*.

The *Trypanosoma*, so far as is known, has no separate cycle within a fly—the tsetse fly (*glossina palpalis*). This fly only acts as a carrier, and is thus different from the anopheles of malaria.

As to “sleeping sickness” of which the trypanosoma *may* be the cause, it was first known in the Congo or the back country of the West Coast of Africa. It was scientifically unknown until 1901, when Dutton found trypanosoma in the blood of a European suffering from a peculiar combination of symptoms, described as tropical disease. This was published in 1902. Later the trypanosoma was found in a blood film taken from a native child in the Gambia. A second case caused the Liverpool school of Tropical Medicine to send Drs. J. E. Dutton and J. L. Todd, in 1903, on a research expedition to Senegambia, and their report was published the same year.

They found that the trypanosoma varied in distribution and prevalence, that it was more prevalent in the rainy season, and near rivers. Many who were attacked were listless, and some had fever. Further observation revealed the fact that the disease attacks especially the negro race, that hundreds of slaves died of it in plantations or on board the transport ships. A few of the half-breeds appear also to be susceptible to it, and the disease has been known in the case of two or three Europeans—a notable instance being the recent death in London of the wife of a missionary from sleeping sickness.

Recently the disease has spread into East Central Africa, especially up the Nile and into Uganda, where entire villages have been depopulated. In one province—Busogo—30,000 natives died within the last three years, and in another district on the shores of Lake Victoria Nyanza, Dr. Nabarro stated that 50,000 deaths were caused by it last year alone!

In 1902 the Royal Society commissioned Drs. Low, Christy, and Castellani to investigate the disease in Uganda. Manson, however, had worked out two or three cases of Congo sickness which were sent over for accurate investigation, and he held some suspicion that the cause might have been the nematode *Filaria perstans*, which was common in South America and the West Indies, but no sleeping sickness was known to occur in any of these areas. The result of the 1902 expedition of the Royal

Society (the proceedings of which, through the courtesy of Sir John Evans, are before us) resulted in Dr. Low finding that *Filaria perstans* was not a cause, in Christy pointing out the geographical distribution—the North East Coast, and the islands of the Lake, and in Castellani finding trypanosoma in the cerebro-spinal fluid in 56 *per cent.* of cases of sleeping sickness. Low and Christy returned, and Castellani remained. The Royal Society, in conjunction with the Foreign Office, sent out a second Commission, Dr. Bruce (who had previously discovered the blood parasite of nagana, the carrier of which is the tsetse fly), and Dr. Nabarro. The recent proceedings of the Epidemiological Society have made the findings of these investigations public property.

The conclusions are that trypanosoma is extensively found in the blood of non-sleeping sickness cases—every third or fourth native has it—but in addition is found in the cerebro-spinal fluid also of all cases of sleeping sickness, but not in trypanosoma fever; that streptococci and diplococci are also found in some of the later stages; that the lymphatic system is greatly affected, and that there is much similitude between the map of the tsetse fly and that of the area of sleeping sickness. There are “fly belts” and “sleeping sickness belts,” though there are plenty of tsetse flies in some places without sleeping sickness; the areas of both are forests near the water’s edge, dense undergrowth—not swamps like malaria, and not grassy plains. The tsetse fly does not follow big game; it may be on one side of a river and not the other, also air-breathing fish may contain the fly.

The disease certainly has a long incubation period, and two, three, or five years after the person has left an endemic centre, he may fall a victim, as in hydrophobia. After onset, the disease makes rapid progress, and is mostly of three or four months’ duration. Death is hastened by inanition, pneumonia, dysentery, or septic bedsores.

The symptoms are a slowly increasing and insidious drowsiness. The patient is languid and taciturn, slow and dejected, dull, listless, and has an overpowering lassitude. Occasionally there is a sense of weight or pain in the head, and there may be giddiness. The patient can be roused, and then replies in monosyllables, but correctly. He can stand, but with tremor. There is no definite knowledge of time or place with him.

Food collects between the cheeks, and the urine and motions pass involuntarily.

The chief pathological condition in the brain is a collection of lymphocytes in the peri-vascular lymphatic channels, which cells are said to withdraw the oxygen otherwise meant for the neurons.

As to the trypanosoma itself, I hand round the four reports of the Royal Society, and the joint paper of Drs. Rose Bradford and Plimmer in the *Quarterly Journal of Microscopical Science*, the latter showing the special trypanosoma of the London sewer rat, and I here express my indebtedness to Dr. Plimmer for his trouble in giving me personally much information.

The trypanosoma has (1) a micro-nucleus; (2) a macro-nucleus; (3) an undulating membrane which all stain with erythrosin; and (4) a vacuole and a flagellum. As to the multiplication of the rat trypanosoma, that of the conjugation of two cells is one method; the micro-nuclei fuse and then divide, and the division appears to be more vigorous after conjugation. The second method appears to be analogous to that of the plasmodium, with amœboid movements. A bunch or tangle seems to be formed in which the micro- and macro-nuclei mix together, and then amœboid bodies are thrown off, from which it is not quite certain, but it is surmised that the complete trypanosoma grows. Phagocytes are seen to attack the amœboid forms, and the plasmodium may, by blocking up the vessels, produce stasis. It is interesting to note that although the multiplication of these lower organisms appears to be in a great measure by fission, they may multiply by conjugation, which appears to reinforce their vitality. The division of the *Paramœcium* was watched by Calkin until fission had taken place to seven hundred times, after which there was no further vitality to reproduce itself in this manner.

Notes on Adolescent Insanity in Dorset. By GEORGE A. RORIE, M.B., Senior Assistant Medical Officer, Dorset County Asylum.

CONSIDERABLE attention has recently been directed by several observers to adolescent insanity and dementia præcox,

and an increase in the numbers of these varieties, especially of dementia præcox, has been stated to occur, which means an increase in the more hopeless and demented cases. Dr. Wood, for instance, at the Annual Meeting of the Medico-Psychological Association, remarked on the increase in the number of cases of mental breakdown during the age of puberty and adolescence among persons of the upper and middle classes—the ages of which on admission he placed at from eighteen to twenty-eight years—and he suggested as a cause the greater strain of education and the worries of life during the present time. Again, at a meeting of the Section of Psychological Medicine of the British Medical Association, Dr. Robert Jones mentioned an increase of dementia præcox and a general increase of the less curable forms of insanity.

Under these circumstances it appeared to me to be an interesting investigation to ascertain what facts could be elucidated from the cases at Dorset County Asylum regarding these points, the patients admitted being mainly of the agricultural class.

A series of cases was drawn up, extending back to the year 1856, including all cases of pure adolescent insanity—that is to say, between the ages of fifteen and twenty-five on admission. It is noticeable that a large number of imbeciles and epileptics were admitted during this period of life, the state of adolescence probably being a definite exciting cause in such cases of outbursts of restlessness, excitement, and violence, which conditions rendered it necessary for them to be sent to an institution.

On examining the cases of pure adolescent insanity, one finds that they roughly divide themselves into three groups—(1) simple forms of insanity of a maniacal or melancholic type, which recover in a few months, and as a rule do not recur; (2) recurrent forms, in which the primary attack is recovered from satisfactorily, but which relapse, the recurrences taking place at intervals for many years, and even in many cases for the rest of their lives; (3) those cases which pass rapidly into hopeless dementia.

These three groups are pretty easily recognised, though cases are found connecting all three varieties with each other. The percentages of the groups from the total cases collected were about 34 *per cent.* simple, 15 *per cent.* recurrent, and 50

per cent. of dementia among the males, and 40·2 simple, 21·2 recurrent and 38·2 of dementia among the females; it is thus seen that 50 *per cent.* of the males and nearly 40 *per cent.* of the females become practically hopeless cases, which result agrees closely with the figures given by Dr. Clouston, provided the recoveries from the recurrent cases are included.

As regards these simple cases, there is little to be said. The majority were cases of mania, though some were melancholiacs. The cases of mania show the usual characteristics of the adolescent period, and are marked by exaggerated self-consciousness, exalted ideas of self-importance, noisiness, senseless laughter, obscenity, and erotic ideas, hysteria being a common symptom on the female side. These cases usually recover in a few months though slight relapses often occur before the final recovery.

The recurrent cases were also usually of a maniacal type, being excited, restless, confused, and childish—chattering nonsense—and often having fleeting delusions and hallucinations. They usually recover in a short time, but seem unable to keep well for long when away from the restraining influence of asylum life; they may be discharged, return to situations, and do fairly well for a time, but usually after a year or two return, often with the same type of attack as before, from which they may again recover. It is a question, however, whether these cases should not be included in the last group, as there is almost always hereditary predisposition to insanity, and there is often a gradual weakening of mental powers noticeable after each attack; in fact, in the worst cases, they appear to become unfit for life out of an asylum, though appearing well while in it; they suggest a much extended case of dementia. As an example may be given the case of I. C—, a woman admitted first in 1863, æt. 20, suffering from an attack of acute mania. She recovered in four months, was re-admitted two months later with a similar attack, recovered in ten months, and so on for thirty-three years, having ten attacks, in the last of which she died. In all these attacks she was noisy, excited, and destructive, but was worse and more depraved in habits in the latter attacks. Even during each attack there was a tendency to improve and relapse, and I have no doubt that the same thing occurred to a less extent while she was out of the asylum.

It is to the last group—the cases of rapid dementia—that I

wish to pay most attention. These cases have been described under the names of premature dementia and dementia præcox, and under the latter name have been subdivided into three types according to the predominance of certain groups of symptoms, namely, hebephrenic, katatonic, and paranoid forms.

As regards the cases collected, the majority approximated to what is described as the hebephrenic variety, though a considerable number were katatonic, especially among the female cases, a few only relatively being paranoid ; but many showed such a variety of symptoms that it would be difficult to classify them satisfactorily.

The average age was about twenty-two, the youngest male being fifteen and the youngest female sixteen on admission ; but the symptoms very often extended over a considerable time previous to admission—often years,—and if a careful history is obtained may be occasionally traced back to birth. In one case, in which the mother gave a history of shock during pregnancy, the child was slow in learning to walk and talk. It was backward at school, peculiar in disposition, and ultimately developed more acute symptoms. Another example is as follows :—The patient, a female, was backward at school, would not associate with other children, had many governesses with whom she could not get on, and whom she thought cruel, was difficult to manage, and remained long in bed in the morning. As she grew older her menstruation became irregular, and from that time on she was under treatment as a “neurotic” by doctors, hypnotists, and Christian scientists ; she became worse, developed delusions about her relations, was at several homes, and was finally certified as insane.

Many of these cases while in this stage land into the hands of the police before being certified, owing to assaults, vagrancy, etc., and many of the women lead the lives of prostitutes. The conditions which lead to these patients being sent to an asylum are often either attempts at suicide or attacks on friends and relations, frequently due to hallucinations of hearing or delusions of persecution.

The above examples exhibit a few of the common symptoms met with at the beginning : the confused and lost condition of mind generally, the excitement often associated with violence, the alteration of feeling towards friends and relations, and the frequent occurrence of delusions and hallucinations ; a large

proportion, both male and female, were masturbators ; this habit, though often given as a cause, being in all probability a symptom, just as the frequent occurrence of " religious excitement "—often given as a cause—is no doubt a symptom. They are most pitiable cases, and it is most painful to see evidently fairly healthy young men and women in this state, especially in the stuporose cases, where they are the picture of hopeless dementia, the expression a blank, resistive, and often cataleptic, and the saliva dribbling from their mouths ; this last symptom, often associated with refusal of food, being difficult to explain satisfactorily. They are also almost always dirty and wet in habits, often very destructive, usually in an aimless way. They all have the common tendency to pass rapidly into dementia, some from the very beginning, others after some months or longer of the acute stage ; many showed a marked relapsing tendency, having exacerbations of the acute symptoms. Other marked symptoms and habits, such as posturing, stereotyped movements, picking sores, pulling out hair, etc., could be mentioned, but these cases have been fully described in the recent text-books.

After passing through this very troublesome wet and dirty stage, these cases, if they live, often become quiet, clean, and fairly useful demented, and appear to enjoy life to a certain extent, but many are miserable and hopeless wrecks to the end.

A remarkable feature to me was the prevalence of tubercle in these cases ; some were strumous or phthisical when admitted, and though one would expect to find these cases with a liability to tubercle, I was surprised to find the tubercular death-rate so high, especially as phthisis is not a very common cause of death in this asylum. Twenty-one out of thirty-seven men died of phthisis and other tubercular diseases—one case of " marasmus " not being included—and thirty out of forty-three women, the other causes of death being mainly apoplexy, heart disease, and cancer. Turning to the cause, one finds, as one would expect, that the hereditary predisposition to insanity is a common factor, though it is not ascertained in as many cases as it should be for a variety of reasons. There appears to be no special relation as to which side—paternal or maternal—is affected.

Here it is interesting to notice that one frequently finds

several cases occurring in the same family and coming on at much the same time of life ; thus I have found five cases of two brothers being affected, four of two sisters, two of brother and sister, and in one case three sisters, all cases of imbeciles and epileptics being excluded.

The exciting causes stated most often among the male cases are over-study, religion, accidents, and after fevers, and among females, religion, worry, and after fevers ; but there is little doubt that religion, masturbation, and hysteria are symptoms of the disease referable to this period of life. Everything points in these cases to their being developmental, that there is a fault somewhere from the beginning ; the frequent history of hereditary insanity or phthisis in the family, the stigmata often met with, the occurrence of several cases in one family, the gradual development—often dating back to birth,—the period of onset, the progressive degeneration, and the prevalence of tubercle all lead one to believe that they are developmentally weak, and whether any other exciting cause, such as those given, be necessary or not is a question. It is possible that the extra strain of over-study, exhaustion from disease or the shock of accident may help to determine the attack, but to me it seems unnecessary. As an observer has stated, it appears as if mental vitality was provided sufficient only for childhood and early youth and not enough for the whole existence ; there is evidently an all-round degeneration on the part of the patient. As regards the question of increase, I find that there has been a definite though irregular increase in the proportion of these cases admitted during the last ten or twelve years, some years being more marked than others. The recovery rate in these adolescent cases remains much the same, though it appears rather smaller during recent years than thirty years previously ; the explanation of this is a matter one cannot discuss at present, and is an important social question.

DISCUSSION

At the meeting of the South-Western Division at the County Asylum, Wooton, Gloucester, on November 3rd, 1903.

Dr. SOUTAR thought that members would agree with him that they had listened to an extremely interesting and instructive paper, and he was glad to find that clinical subjects were again coming into vogue. Dr. Rorie's paper showed that the great mine of clinical research was not yet exhausted. Whether the type of insanity they were considering should be called adolescent insanity or spoken of merely as insanity occurring during the period of adolescence he was not prepared to say. Broadly speaking, the cases which were classed as adolescent were those

which occurred between the ages of eighteen and twenty-five, but between these and cases which occurred at a later date it was often very difficult to recognise any particular difference. It was convenient, however, to classify those occurring in the earlier period, when by far the larger number broke down, as cases of adolescent insanity. He agreed that the great cause was heredity. He might be under a misapprehension in taking Dr. Rorie to say that masturbation was to be looked upon simply as an indication of the mental condition; he (Dr. Soutar) thought that it must be regarded as an important contributing cause in many cases of adolescent insanity. From his experience he thought they could distinguish two definite classes among these adolescent patients: those in whom masturbation was occasional and merely one manifestation of a general loss of self-control, and those who were by habit inveterate masturbators. It was the latter class who very soon fell into the third group mentioned by Dr. Rorie. Amongst these adolescent patients there were many in whom feeble circulation was a marked characteristic. In the treatment of such cases he had found advantage, he thought, from the administration of strophanthus and belladonna in full doses. He did not argue that the patients owed their recovery to the use of these drugs alone, but merely that the drugs, in conjunction with the other agencies usually employed in the treatment of such cases, contributed to their recovery.

Dr. AVELINE said that an interesting point in Dr. Rorie's paper was the increased number of these cases. They heard so much of the alleged increase of insanity that he thought the point worthy of investigation. When one looked through the list of patients in asylums, one found that many were admitted at an early age, and remained to swell the proportion of the chronic dementes.

Dr. MACDONALD said that the point referred to by Dr. Aveline was perhaps the most important, namely, was there any increase of this class of case? If they tried to answer the question from published facts, there could be no doubt there had been an increase. Dr. Rorie's paper was a valuable contribution on an important matter, and one which was likely to become more so as the public awoke to the increasing scourge of over-crowding in many of our cities.

Dr. STEWART said the subject of the increase of insanity was one which had engaged his attention for a great length of time. The cases to which Dr. Rorie alluded had increased for two reasons, according to his (Dr. Stewart's) view. One was that the training which the young people of the present day received tended to precocity. The second reason was that the desire for wealth at the present time and the wish to live up to a higher standard of comfort were much greater than obtained forty or fifty years ago.

The CHAIRMAN thought that the present system of education was largely responsible for the filling of asylums with young patients. The old system of obedience to parents appeared to be quite upset, and children were brought up now-a-days to think that they knew more than their parents. He believed that the license and liberty permitted to girls and boys in the present age had proceeded to such an extent that when they encountered the first sharp shock of opposition they were not equal to it and broke down. He agreed also that a neurotic heredity constituted a predisposition to insanity.

Dr. RORIE, in replying to the discussion, said that he had tried various cardiac and other tonics, but not strophanthus. As regarded causation, he did not suggest any special mental strain, and in his paper had alluded to the cases being mainly agricultural as distinct from those occurring in the urban districts.

The Relation of Hysteria to Insanity. By F. W. EDRIDGE-GREEN, M.D., F.R.C.S.

THERE are probably few conditions which are more difficult to define than hysteria. It is unsatisfactory to make any

attempt at generalisation with regard to hysteria, as so many exceptions can be found. It is my opinion that a great many distinct conditions are included under the name hysteria. These conditions are probably as different as epilepsy and migraine. All the various so-called hysterical conditions are closely related to insanity. In many families, whilst one or two of the members are insane, several others are hysterical, and others, again, suffer from allied nervous disorders. I will discuss the varieties of hysteria under the following heads :

1. Neurasthenia related to melancholia.
2. Delusional hysteria related to delusional insanity.
3. Emotional hysteria related to mania.
4. Hysteria with symptoms due to auto-suggestion related to the hypnotic state.
5. The hysterical fit related to epilepsy.

I use the term hysteria for want of a better one, and to describe certain symptoms which appear to be functional. It is certain that serious organic mischief of the brain may only give rise to hysterical symptoms during life, and it is probable that as our knowledge of the pathological conditions of the nervous system improves the term functional will be less and less used.

Neurasthenia may be defined as a condition of nervous exhaustion, and it is certainly a distinct complaint from ordinary hysteria. Healthy persons may suffer from neurasthenia as the effect of a prolonged strain on the nervous system. There are, however, others who suffer from neurasthenia from causes which would be quite inadequate in the case of the majority of persons. Such persons usually sleep for a longer period than is normal, and suffer considerably when deprived of a few hours' sleep, being depressed, tired, and exhausted next day. When such persons are from any cause deprived of their regular amount of sleep for a more or less lengthened period—as, for instance, in nursing a relative or attending to a child,—they soon pass into a condition of neurasthenia which may develop into melancholia.

Delusional hysteria is closely allied to delusional insanity, and in many cases terminates in it. A great many sane persons suffer from prejudices and ideas which are closely allied to delusions, and may develop into them. Many are only an exaggeration of the ordinary feminine qualities. Many

women have a particular dislike to certain things, but a woman who did not in the least mind the presence of a mouse in the room might become in a frantic state at the sight of a black-beetle. In many cases the patient has a certain fixed idea. In one case under my care this took the form that she would be ill after an action of the bowels; she therefore kept them from acting as long as she could. No reasoning on the subject had the slightest effect. Many women have similar ideas, and with more reason, regarding the period of menstruation, and this is unwisely fostered by their friends until the period is regarded as a time of serious illness. Many patients suffering from these fixed ideas are well aware that the majority of persons look upon them as absurd, and often because their friends have tried to laugh them out of the delusion have not in future spoken of it. As dwelling on these delusions is the means by which they become accentuated, it is of the greatest importance that the attention should be directed into other channels.

Emotional hysteria is distinct in that there may be no delusions. The patient may under ordinary circumstances be perfectly rational and have an intelligence above the normal, but from quite inadequate causes of irritation apparently lose all control of themselves, and abuse and strike those about them. The appearance of the patient at the time is exactly like that of a patient suffering from acute mania. I believe that if photographs were taken of both conditions and compared, it would be impossible to say to which each belonged.

Neuromimesis is a condition which has many points which are distinct from the other varieties of hysteria, though it may be associated with them. In this condition some well-known disease is mimicked. I believe that the symptoms in these cases are due to auto-suggestion, and I have found that they may be modified and altered by suggesting symptoms which ought to appear as a necessary consequence of those of which the patient complains. The distress of the patient in the greater number of these cases is real and by no means imaginary, which unfortunately is the popular opinion. There is no doubt that delusions may arise from auto-suggestion, though it is not the cause of all delusions, so I have made a separate class of those which arise in another way.

The hysterical fit has been so often described that it is only

necessary to allude to it here. It may be associated with any of the other conditions.

Not only is there no dividing line between hysteria and insanity, but there are a great many cases which are called insanity by one physician and hysteria by another. I believe that the cause is exactly the same in many cases of hysteria and insanity. This particularly applies to those cases which commence as hysteria and terminate in insanity. It is a curious fact that many hysterical persons, on becoming definitely insane, lose many of the characteristic symptoms of hysteria—such, for instance, as the hysterical fit. I know there are many who would say that some of the cases I have referred to are not hysteria, and that they should be called insane; but the hysterical symptoms predominate, and they are not certifiably insane. It is quite certain that the friends of the patient emphatically prefer that the case should be called hysteria in preference to insanity, and I think that in cases which are not certifiably insane, and in which the hysterical symptoms predominate, it is not only fair to the patient to call the complaint hysteria, but that it is undoubtedly the correct diagnosis.

DISCUSSION

At the Meeting of the South-Eastern Division, at St. Luke's Hospital, October 29th, 1903.

The PRESIDENT said he concluded that what Dr. Edridge-Green was desirous of obtaining was information from superintendents and medical officers of large hospitals for the insane as to the prevalence or not of hysteria among their patients. What struck him at the outset was that among female patients in asylums one did not see any large number of true hysterical fits. Hysteria as seen in everyday life by the general practitioner and by the ordinary physician was not observed by the medical officers in institutions for the insane in the same form. There was no doubt that hysteria occurred in all families of neurotic descent, and that it was the stepping-stone in those families to more advanced and pronounced mental alienism. But when the patient became *certifiably* insane, one did not find that definite hysteria which was met with earlier in the case. It was a very interesting fact, and he had observed it in his experience, which extended to more than thirty years. He would like to have the opinions of others; he had never seen it stated in books, though, curiously enough, Dr. Edridge-Green had hinted at it. He (Dr. White) had intended leading up to this point in opening the discussion.

Dr. W. H. B. STODDART said the members were very much obliged to Dr. Edridge-Green for bringing up the question of hysteria and insanity, because a great deal of confusion seemed to exist in the minds of some people with regard to those states. He thought that confusion arose from the distinction which was drawn between neurological hysteria and what was known popularly as "hysterics." What physicians meant by hysteria was the condition which included hysterical fits, principally associated with epilepsy, hysterical paraplegia, hysterical spasms, hemi-anæsthesia, local anæsthesias, and monoplegias. What one understood by "hysterics" was that emotional condition into which a girl passed when she had an attack of excitement. Dr. Edridge-Green had said that if a photograph were taken of a girl in that condition, and compared with a photograph of a girl in an

asylum with mania, one could not distinguish between them for purposes of diagnosis. In that he agreed with Dr. Edridge-Green. He would go further, indeed, and say they were both in the same condition, *i. e.*, a condition of mania. He would, however, differ from Dr. Edridge-Green on the question of calling a patient who was uncertifiably insane a case of hysteria. In institutions for the insane there were large numbers of voluntary boarders, some of whom were excited and some suffered from hallucinations; but he (Dr. Stoddart) would certainly classify them as cases of insanity, not of hysteria. Hysteria he regarded rather from the physical point of view, and insanity from the psychical.

Dr. RICHARDS said his experience at Hanwell for twenty years, where he had charge of the females alone, coincided with what the President had just remarked—namely, that hysteria was extremely rare among the inmates of asylums. In fact, he could not recall a single case of the kind among the patients under his charge. On the other hand, cases occasionally occurred among the nurses. He also felt in accord with the remarks of Dr. Stoddart as to the difficulty referred to by Dr. Edridge-Green in distinguishing between cases of hysteria and of mania. From what the writer of the paper had said, it seemed that there must be two forms of classification: one scientific and medical, and the other for the friends. If a case were one of mania, he thought it should be called so definitely, and if it were hysteria it should receive that name.

Dr. THOMSON said he was not clear in his mind as to how Dr. Edridge-Green would differentiate delusional hysteria from insanity. He seemed to indicate that they were separate maladies, and that the medical man should make a clear differential diagnosis. If Dr. Edridge-Green would state the lines on which that differentiation should be made, he would be glad.

Dr. EDRIDGE-GREEN, in reply, thanked the members for the way in which they had listened to his paper, and for their remarks in discussing it. The points raised by the various speakers had been just those he expected would be raised. In his own mind he was perfectly clear on those points. The hysterical patient had all the various hysterical symptoms, and, in addition, she was perfectly well aware that some of her opinions differed from those of the majority of people. That did not correspond with the ordinary idea of insanity, and he would say emphatically that people who were in that state were not insane. His diagnosis was not given as a sort of sop to the patient and her friends; in fact, it was given from a purely scientific point of view. He thought many of the hysterical symptoms were due to a struggle in the mind of the patient. In fact, many a patient had said to him, "I am not insane, doctor, am I? I have not any delusions." Such patients had an idea that they were more or less on the borderland of insanity. When they became insane their aspect entirely altered; there was no longer that mental struggle; the patient gave herself up to the condition and no longer worried about it. He thought he could best illustrate that by referring to delusional hysteria. It was certain that the majority of those present would not object in the least to being left alone in that room. But many of the sanest people would get into the most frantic state if that were done; still that would be no evidence that such person was insane. Some people could not stand a cat being in the room, yet such persons might possess intelligence far above the average, and might be able to properly manage all their affairs. It would be ridiculous to call such people insane; one might just as well say everybody was insane. The idea did not develop into a delusion which interfered with the person's actions in ordinary life. One person, for instance, complained that she was always ill when she had an action of the bowels, and such action produced hysterical manifestations. She had hysterical fits, with globus hystericus and other symptoms, but she was perfectly sane when the bowels were confined. There was a deviation from the normal in that case, and yet she was not certifiably insane, and nobody had attempted to say she was insane; her husband and friends had not thought of such a thing. Some alienists might say she was insane; there was a deviation from the normal, and, indeed, in all such cases there was a departure from strict sanity. It could not be said that a person who would not be left in a room alone was strictly sane. Nineteen twentieths of the symptoms in such cases were hysterical as defined by the ordinary text-books, the twentieth being insane. But when the case passed from the hysterical to the insane, the hysterical symptoms disappeared and the insane predominated. That was the case with one

patient he saw in the institution that day, whom he saw previously, and who in past times was a very marked case of hysteria. Her aspect was absolutely different in her pre-asylum days. Dr. Stoddart had said the cases were really mania, and that there was no distinction; but he would remind him that such attacks might occur occasionally and last only half an hour. Many physicians would call it mania transitoria; but he (Dr. Edridge-Green) would describe it as hysteria, especially when the patient was absolutely sane apart from that, and above the average in intelligence. It could not be regarded as a definite case of mania if it only lasted half an hour. Such a person might at any time develop into a case of mania, but the case as he described it, whatever name might be given to it, was not certifiable, and must be kept distinct from ordinary insanity.

The PRESIDENT said he felt that, as President, he must have the last word. While the Association thanked Dr. Edridge-Green very much for his definite statement, there were many present who would take exception to it. They recognised that in accounting for the so-called delusional hysteria in any other way than terming it insanity was an evasion of a certifiable form of insanity. He felt bound to state there was a hard and fast line which alienists recognised, and they could not recognise any evasion of the accepted definition and treatment. He hoped the members present would support his remarks.

Dr. DOUGLAS said he would be sorry to interfere to prevent the President's word being the last. The class of case to which Dr. Edridge-Green referred seemed quite clear. A lady had a temporary fit of excitement, during which she had certain delusions; but it passed off, and she was perfectly able to do her work, both before and after the fit. Moreover she was conscious of the fact that during the fit she had not been behaving properly. One could not deprive such a person of her liberty, but could only take proper care of her during the fit. Surely that would not be classed as a case of insanity.

A MEMBER.—What about the question of criminal responsibility?

Dr. DOUGLAS.—That is another matter altogether.

Dr. EDRIDGE-GREEN said Dr. Douglas had emphasised the point he had been trying to make. Where was the line to be drawn? What was the difference between a person who became violently angry because of a real cause and another who was equally angry on account of an imaginary grievance. He would give an example. A medical man consulted him about his sister-in-law. One point about her, and one reason why she was going to be put under restraint, was that she struck those who were round about her on the least provocation. He (Dr. Edridge-Green) mentioned that as a sign of insanity, but the doctor said, "Oh, no, that is not a sign of insanity—sane women do that."

Description of an Addition to the Hospital at Cheadle.

By JOHN SUTCLIFFE, M.R.C.S., Senior Assistant Medical Officer.

THERE has lately been added to the resources of the Manchester Royal Lunatic Hospital at Cheadle an additional building, a description of which may be interesting to many connected with asylums and hospitals.

It is situated about two hundred yards from the main hospital, and is so constructed as to be suitable for the reception of patients of either or both sexes, of acute or chronic cases, or of the wealthy or the less well-to-do classes.

At present this small hospital contains accommodation for seventy patients, and it is the intention of the Management to treat in it patients of both sexes: the cases free from objectionable practices, and who are to a certain extent appreciative and companionable; the convalescent patients and those suffering from the minor forms of insanity who object to the life of the large main hospital, and for whom the quietude of the villas and cottages is not considered desirable.

It is built of Ruabon brick, faced and ornamented with terra-cotta mouldings, roofed with Perfecta tiles, and consists essentially of a central block and two wings.

The front portion of the central block is three stories high, the rooms on the ground floor being for the reception of visitors, an office, etc., and those on the upper floors being sitting and bedrooms for the staff.

Behind this part of the administrative block, and opening into it, is a large hall, communicating with the two wings on each side and with the kitchen behind. There is a serving window from the kitchen to facilitate serving when the hall is used as a dining hall. It is lighted solely from the roof by means of a stained glass window. Overhead are two balconies permitting passage between the two wings on the upper floor—the one on the front side being specially designed for the use of the medical officer when his services are required during the night, and for the nurses. At present these balconies are not used at all by patients, but if at some future time it becomes necessary that they should be used by them, a light iron screen has been designed and could be easily erected to prevent attempts at suicide by leaping over the railing into the hall below. As a precaution against the doors to these balconies being left unlocked, they are fitted with spring locks and Cartland's Helical Climax spring hinges, by which they are mechanically closed.

The kitchen is also lighted from the roof, and separated from the scullery behind by a glass screen, which makes the scullery lighter and more cheerful and allows supervision of the maids from the kitchen. Behind the kitchen are the usual offices, and beneath it are a wine cellar, a coal cellar, and one for the heating apparatus.

The two wings are alike. The chief and most striking feature of each is the great size of the gallery, which makes a splendid lounge and can take a full-sized billiard table, on

which every shot can be played without necessitating the use of a short cue.

There is no open fireplace in the gallery, but there is in each of the two large rooms, and in all the small ones facing the front. The sitting rooms in the small corridor at the end of the gallery are not so fitted with open fireplaces.

The railing of the escape stair at the end of this corridor is protected by strong iron wire netting.

The small rooms on the upper floor of this corridor are boarded throughout, sides, floor, and ceiling. The end ones are lighted from the roof, the window and shutter in which can be raised and lowered by a rack and pinion arrangement outside the door. The windows, which are of the ordinary kind, of the rest of this set of small rooms are fitted with folding shutters.

The whole of the ground floor is floored with wooden blocks with the exception of the lavatories, which are tiled. The windows have cast-iron casements, the panes being octagons and small squares; they are fitted with a lock and a stay to prevent them being opened more than five inches. The doors of the w.c.'s are fitted with Bale's patent catch, and reach only from within a foot from the top to a foot from the floor.

The baths, which are of enamelled porcelain, are fitted with a contrivance designed by Mr. Walter Scowcroft, the Medical Superintendent, by which the hot and cold waters are mixed before entering the baths. This contrivance consists of one pipe conveying the hot water and one the cold to a central plug tap, so constructed that the hot and cold water meet after passing through this tap in a short length of brass tube between it and the bath. These two pipes are fitted with stop taps, by which the quantity of water passing through them can be regulated so as to regulate the temperature of the water entering the bath. The two stop taps are enclosed in a locked box, part of the casing at the head of the bath, and when once regulated the water always flows into the bath at the proper temperature, which temperature cannot be altered by the attendants, who have control only of the central plug tap, which is worked by a key, which is removable, at the top of the casing.

The central heating is by steam, generated in an "Ideal Boiler" of 15 lbs. pressure, and passing through wrought-iron pipes, which are conducted on the ground floor in cement-lined

troughs with cast-iron coverings, to radiators placed at suitable positions in the galleries and large rooms. The small rooms, in which there are no open fireplaces, and the bedrooms are sufficiently heated by radiation from the circulation pipes, which in these places are made larger. They run, for safety, between the window-head and ceiling, and are guarded by boarding fastened to the wall immediately over them. The pipes to the radiators on the upper galleries run in small wooden casings, fronted by a cast-iron grating. The whole of the condensed water is returned to the boiler.

The domestic hot-water system is by a Royle's patent calorifier supplied by steam from the same boiler—the circulation pipes being copper, tinned inside and out. There is storage for 600 gallons of hot water.

In addition to the ordinary means for natural ventilation, there are movable fanlights over every door, so that cross ventilation is obtained in all the small rooms. Behind each radiator there is a grid, with valves to regulate the inlet of air, which allows air to pass from the outside into the radiator box, where it is warmed before circulating. From every room and every corridor there are one or more outlets into ducts which communicate with four ventilators in the roof, in each of which there are steam-pipes to create an up-current.

The lighting is electric incandescent. The general lighting is 16-candle power, and the fittings pendants, with the exception that the small rooms on the upper floor of the side corridors have oyster fittings in the ceilings. All the switches are outside the rooms.

The precautions against fire—in addition to the stone escape stair at the end of the corridors and the manual engine and fire brigade, which is staffed by the hospital employes—consist outside of five fire-plugs on the town's main, which has a pressure of 120 lbs. to the square inch, and a fire-box containing stand-pipe, hose-pipe, and branch. Inside there are seven fire-hose reels, placed in such positions that any and every part of the building can be reached by one or other of the hose-pipes and played upon by water direct from the town's mains, and at its full pressure. There are also seven fire alarms close to the reels, which are electric, on the "break-glass" system, indicating at a central station the place where the alarm is given, and also warning the staff at the main hospital by ringing alarm bells.

There is telephonic communication between it and the main building.

The total cost of the building was £17,750, but it should be mentioned in this connection that the administrative central block will not need any extension when the hospital is enlarged, as is contemplated, so as to accommodate fifty more cases.

Stress.—By CHAS. MERCIER, M.B.

IN his paper on "Wages, Lunacy, and Crime in South Wales," Dr. R. S. Stewart asks how such a state of things as he describes is "to be reconciled with the lately expressed opinion that 'insanity is, and ever will be, the product of two factors, stress and heredity?'" These words he puts in quotation marks, but I am unable to trace them to any other source. The doctrine that insanity is a function of two variables, heredity and stress, was first enunciated by me some thirteen years ago, and can scarcely therefore be regarded as a novelty now; but, as it is clear, from Dr. Stewart's question and other remarks that he has a very erroneous notion of the doctrine, and as, moreover, it has been misapprehended and therefore misrepresented by others, perhaps you would allow me space to re-state it; although I think that any one who does me the honour to read it in its original form, as set forth in *Sanity and Insanity*, would scarcely fall into the errors that I have alluded to.

My view is that insanity is a function of the two variables, heredity and stress. That is to say, that its occurrence is due to a certain stress acting on a certain organisation. According as the organisation is stable and firmly compacted, the stress necessary to produce disorder is the greater; and according as the organisation is faulty, the less stress is needed to impair its action. So, the stronger a girder, the more weight will it bear without breaking; the weaker it is, the less force is needed to deflect or sheer. As organisation results from heredity, the two necessary and only factors are heredity and stress.

It is obvious that, in this exposition of the doctrine, the word stress is used with a very wide connotation, to include every

influence that can act upon the highest cerebral regions in such a way as to disorder their mode of working. This extended meaning of the word is emphasised, explained and justified in subsequent chapters, which enumerate and classify all, or the great majority, of the influences alluded to ; all of which, direct, indirect internal, and indirect external, are specifically included and classified under the genus " stress."

According to this scheme, alcohol circulating in the blood is a stress. Cerebral hæmorrhage is a stress. The advent of puberty is a stress. Child-bearing is a stress. Excessive exertion is a stress. Precariousness of employment is a stress. Loss of fortune is a stress. Accession to fortune is a stress. Attendance at a religious " revival " meeting is a stress.

It has happened, unfortunately as I think, that the term "stress," imported from the terminology of engineering into the terminology of psychiatry with a definite and wide meaning attached, has since been adopted and used by other writers in a very different sense, and with a meaning at once less definite and more restricted. It has been used to express the effect of use and of fatigue, as when ataxy is said to be localised in the legs of the postman, or the arms of the hammerman, by " stress." It is apparently used by Dr. Stewart, in the article which has elicited this protest, to mean "distress." I submit that it is inconvenient and unfortunate that a word, imported with a definite and specific meaning into a branch of science in which it has not been used before, should be appropriated, in that branch, to meanings inconsistent with the meaning originally attached to it. As long as we think in words ; as long as we use words for the purpose of communicating with each other ; so long it is of the very utmost importance that the words that we use should carry the same meaning, both to ourselves at all times, and to others ; so long it is most desirable that each word should be restricted to one definite, specific, precise meaning.

I have no patent for this particular word. I have no bigotted attachment for the use to which I put it on its importation into our specialty. If it is undesirable so to use it, no doubt another can be found for that use ; but I desire to raise a respectful protest against the practice of using in a new sense, without notice that it is so used, a word which is already current and stamped with a specific value. It would be incon-

venient if some people called that coin a shilling which other people call half-a-crown.

Taking the word "stress" in its original sense, Dr. Stewart's question, which elicited this communication, admits of a ready answer. He asks why a rising wage-rate, diminished labour, and increase of leisure are associated with increase of drunkenness, crime, and lunacy; and how such a state of things is to be reconciled with the "lately expressed" opinion that insanity is the product of the two factors, stress and heredity. If we take the term "stress" as Dr. Stewart appears to take it, to mean "distress," then of course the state of things that he describes cannot be reconciled with the doctrine. But if we take "stress" to mean what it was defined to mean in the statement of the doctrine, the difficulty disappears. I am not a Glamorganshire miner, nor am I familiar with the habits of that class of workers; but I gather from Dr. Stewart's statement that they resemble the miners of other districts in the fact that when they have more to spend, they spend more; and that a considerable proportion of the increase is spent in drink. Now, alcohol circulating in the blood is an insanity-producing stress, and one of the most potent that we know of; so that if insanity increases under the state of things described by Dr. Stewart, the occurrence is not an exception to, but a corroboration of, the doctrine that insanity is the product of two factors—heredity and stress.

Clinical Notes and Cases.

Clinical Notes on a Case of Acute Mania; bearing upon the Effect of Acute Intercurrent Disease as it affects the Mental State. By LEWIS BRUCE, M.D., Edin.

THE following case is of interest as it shows that repeated attacks of acute intercurrent disease may finally produce recovery in patients suffering from mania which has taken on a chronic phase.

The patient, a male æt. 24, was admitted on May 26th, 1903, suffering from acute mania, which had lasted for a few days. There was a

history of direct and collateral hereditary predisposition to insanity. The patient was a steady man, leading a healthy outdoor existence, and he had never had any previous attacks of mental disease.

The cause of the present attack was anxiety and worry, due to the suicide of his brother, and its onset was said to be sudden.

The patient was a particularly well-developed and well-nourished man. His alimentary system was disordered. His leucocytosis was 15,300 per c.mm., with a polymorphonuclear percentage of 72. His heart's action was regular and not rapid, the pulse rarely exceeding 70 beats per minute. His skin was greasy, and the perspiration had a sour odour. Forty-eight ounces of urine and 450 grs. of urea were excreted in the twenty-four hours. No disorder of the sensory functions could be detected. His skin and tendon reflexes were slightly exaggerated.

Mentally.—He was excited; he suffered apparently from hallucinations of hearing; his attention could not be retained for a minute; he was incoherent in speech, and only partially understood what was said to him; his sleep was deficient; the muscles of his arms and face showed twitchings and tremors.

He was treated in bed and put on sick diet, largely milk. By the end of a week he was improving and sleeping well, and by June 6th, eleven days after admission, he was quite recovered mentally. His leucocytosis was fairly low, 13,000; the percentage of polymorphonuclear cells was 65. On June 10th his leucocytosis had fallen to 8,000 per c.mm. of blood, and the polymorphonuclear percentage to 43. We have always found that the prognosis in a case of mania with such a blood-count is bad. On June 13th the patient relapsed and again became sleepless. There was a very slight rise of temperature to 98.8° F. as the attack came on, and the pulse rose to 80 beats per minute. The blood was examined at intervals of a few days, but the leucocytosis never rose above 11,000 per c.mm. of blood, and the polymorphonuclear percentage was never higher than 47. The eosinophile cells averaged 4.5 *per cent.* The patient was treated by rest, then by exercise, with a liberal diet and general tonic treatment, but there was no improvement. The maniacal symptoms became less acute and more chronic in character, and the patient became wet and dirty in habits and also destructive. We did not induce a leucocytosis because we thought that, as the leucocytosis was low and the percentage of polymorphonuclear cells very low, any stimulating of the leucocyte production of the bone-marrow might unduly strain the powers of the patient and make his condition worse. Seven weeks after admission, on July 14th, patient suffered from an acute attack of dysenteric diarrhoea, with a temperature of 102° F. His leucocytosis went up to 26,000 per c.mm. of blood, and the percentage of polymorphonuclear cells rose to 80. Coincidentally the patient became quite sane, and remained sane for two days, when he again relapsed, and again his leucocytosis fell to 10,000 and the polymorphonuclear cells to 50 *per cent.* Three weeks later he again suffered from diarrhoea, his leucocytosis rose to 22,000 and the polymorphonuclear cells to 75 *per cent.*, and again he recovered mentally only to relapse. During the first week of October he again suffered from diarrhoea, with a leucocytosis of 30,000 and a polymorphonuclear percentage of over 80 *per cent.*, and again he recovered

his mental balance. This time, however, he did not relapse, and in a month he put on 21 lbs. in weight. His leucocytosis fell to about 13,000, and the polymorphonuclear cells averaged 66 *per cent*.

We are inclined to think that if we had induced a high leucocytosis in this case by means of a terebene injection early in the attack, we would have saved the patient from a long and brain-cell-destroying illness. The history of the course of this patient's illness, taken in connection with the observations made on the leucocytosis in acute mania published in the *Journal of Mental Science*, April, 1903, suggests that in the treatment of acute mania the induction of a high polymorphonuclear leucocytosis is a most important point to be attended to.

A Clinical Note on Alcoholic Automatism. By W. C. SULLIVAN, M.D., Deputy Medical Officer, H.M. Prison, Pentonville.

THE occurrence of prolonged phases of dream-consciousness is, as is well known, a not infrequent phenomenon of pathological drunkenness, and since these phases are often marked by conduct of a seriously criminal character, their study is, from a medico-legal point of view, of much practical importance. For this reason I have thought it worth while to put together a few clinical observations which seem to illustrate fairly well some of the main facts in connection with these dream-states.

I have confined myself to cases where the actions performed were not very grave socially, so as to exclude as far as possible any motive for untruthfulness on the part of the agent, on whose evidence we have necessarily to rely a good deal. It is, I think, legitimate to suppose that the nature of the dream-state in such cases is not essentially different from that which exists in automatism with, for instance, homicidal impulses; and that therefore, from the clinical conditions in the simple cases, we may infer the possibility of similar conditions in the socially graver cases.

A further qualification, which restricted one's choice very much more seriously, was that the individuals examined should possess a certain degree of intelligence and education, so as to

be able to assist in the elucidation of their symptoms. It is needless to insist on the meaning and effect of this limitation as it regards the average chronic drunkard ; and it is precisely in that class, mentally enfeebled and prone to suggestion and to objectless lying, that states of dream-consciousness are very apt to develop.

In the result, therefore, out of a very large clinical material the number of available observations is meagre.

It should be added that efforts have been made, as far as possible, in the selected cases to control the statements of the patients by outside evidence.

The object of the observations—the exact determination of certain characters of the dream-state—will sufficiently explain the minute detail of the notes on various points otherwise of trivial moment.

With the four alcoholic cases I have placed, for the sake of comparison, another observation of considerable intrinsic interest, where entirely similar symptoms developed under some other obscure influence.

Obs. 1.—H. C—, æt. 30, draper, third of a family of six children, the rest living and healthy ; father, a chronic alcoholic, died of dropsy. Nothing else special in family history. Patient has suffered from attacks of vertigo as long as he can remember ; at the age of eighteen he had his first attack of *grand mal*, and has had similar fits at irregular intervals since ; attacks are of classic type with aura of obscured vision, tongue-biting, and occasionally enuresis.

For some years past patient has taken alcohol intermittently, drinking from convivial motives. A very small quantity makes him “lose his head,” and he then gets into a state of dream-consciousness, in which he performs a series of elaborate acts of which subsequently he retains only a fragmentary memory. This peculiarity was present from the outset of his drinking habits, but has become more pronounced of late. Alcohol frequently brings on a fit, but even when no fit occurs the dream-phase is apt to develop. On the other hand, epileptic attacks occurring in the absence of alcohol are not followed by any such phase. The patient has had two or three attacks of hallucinatory delirium with zoopsy after severe drinking bouts.

Received into prison on Tuesday evening on a charge of drunkenness and disorderly conduct, patient was emotional and rather tremulous, but answered questions readily and coherently, was able to sign his name, count out the contents of his pockets, and perform other actions of a fairly elaborate character. He said he had been drinking heavily since Sunday morning, that he was arrested on Monday for repeatedly going in a state of intoxication to the shop where he was employed, that he remembered going there once, but only knew of the other times from hearing the evidence at the police court ; that he had two fits last night

in the cells (tongue was slightly bitten). He had a fresh scratch about four inches long on the right side of the neck, the origin of which he could only explain by saying that he heard he did it himself; he could not say how or why.

Though a little restless during the night, he was a good deal clearer next morning; and in another twenty-four hours had quite come back to his normal level, and was able to give an intelligent account of himself. He repeated the statements he made on reception regarding the circumstances of his arrest, and his version of them was in accord with the police evidence, but he had no recollection whatever of his interview with me, knew nothing of the scratch on his neck or of the explanation of it that he originally gave, was utterly unable to account for the episode, but insisted strongly that he could not have had any suicidal idea. His memory of the other incidents during the drinking bout was very imperfect, and this amnesia was even, as had happened in previous attacks, retrospective, *e. g.*, he changed his lodgings before he got drunk on Sunday, but has now no idea of his new quarters.

Patient is above the average in intelligence. He presents no signs of chronic alcoholism, and no stigmata of hysteria.

OBS. 2.—J. S—, æt. 50, managing clerk. Convicted of indecent exposure.

A little tremulous and depressed on reception, but mentally quite clear. States that he has no recollection whatever of the alleged offence, that his mind is a blank between about 11 p.m., when he remembers coming out of the Holborn Music-hall, and 3 a.m., when he found himself being questioned in the police-station. He accepts, however, the accuracy of the police evidence which he heard at his trial, and which he correctly repeats. It appears that about 2 a.m. he was seen by some passers-by making water ostentatiously in the presence of some girls at the corner of Fleet Lane, and was therefore given into custody.

There is nothing of note in the patient's family history. Health has always been fairly good, except for syphilis contracted about ten years ago. He was temperate up to seven years ago, when, owing to special business conditions, he was induced to drink rather heavily, especially brandy. Within the last eight months he has had two attacks of delirium tremens.

He had been intemperate for fully four years before he developed any tendency to phases of automatism; of late such phases have been increasingly frequent after even slight excess. Amnesia is absolute during the attacks, which have so far never lasted more than about twenty-four hours. During the automatic phases he has frequently made business engagements, etc., of which he has subsequently no knowledge; this has been a source of considerable trouble, as his manner in this condition has been so perfectly rational and coherent as to excite no suspicion of a morbid state. He has occasionally wandered about in these unconscious phases, and has even made short train journeys, but he has never before done anything to bring him into collision with the law.

The patient presents slight nervous signs of chronic intoxication—morning tremor of hands and tongue, hyperæsthesia of the calf-muscles,

—but no symptoms referable to the digestive system. Vision is defective, owing to extensive atrophic changes following syphilitic chorioretinitis. There are no stigmata of hysteria.

Obs. 3.—J. S. L—, æt. 45, journalist. Convicted of larceny of a bicycle.

On reception a little tremulous, but mentally clear. It appeared from the police evidence that a constable saw the prisoner shortly before midnight near Waterloo Bridge rolling a bicycle along in an aimless way; he stopped him, and asked him what he was doing, and prisoner replied that he was minding the bicycle for "some one," whom he was unable to describe. He was taken to the station, and shortly after the messenger boy of a newspaper office where prisoner had occasional work identified the bicycle as his (the boy's) property. Prisoner gives a correct version of the above evidence, which he heard in court, but denies absolutely that he has any memory of the theft of the bicycle. He recollects drinking in a public-house in Fleet Street a little past 4 p.m., but from that time till he found himself in the police-station his mind is a blank, except that he has a hazy memory of rolling a bicycle about in the street and talking to the constable. He recalls, though imperfectly, the scene in the station when the boy identified the bicycle; he remembers particularly that he said to the boy, "Did I not ask for Mr. X?" (manager of the office and an acquaintance of his), and that the boy said, "Yes, and I told you he was in Russia." But while he remembers so questioning the boy he has no memory of the actual incidents to which the question referred. Though the prisoner, in consequence of his drinking habits, has got rather low in the world, his reputation for honesty has been hitherto good, and there appears to be no sufficient reason to doubt the truth of his statements.

There is no neuropathic taint in the family history. Prisoner always had fairly good health. At the age of nineteen, however, he had a severe nervous shock in a railway disaster; he was bruised, and his head was cut, but he did not lose consciousness. From the age of twenty-four he has been intermittently intemperate, taking spirits chiefly. He has had no hallucinatory or delirious symptoms, and no symptoms referable to the digestive organs. On the other hand, almost from the outset his drinking bouts have been marked by a tendency to automatism. In the dream-phases he has done various absurd acts, *e. g.*, on one occasion tried to drive a cab in a crowded thoroughfare, on another walked off with a cannon-ball from the Hoffman House in New York. As a rule there has been total amnesia of these actions, but in a few instances he has had a fragmentary memory of one or two episodes in the obscured period. Prisoner is physically well developed. Motor power and sensation appear normal; patellar reflexes are increased; superficial reflexes normal; pupils are rather small and do not contract to light or on convergence, no sympathetic reaction; visual acuity = $\frac{3}{8}$; colour-vision normal; fields of vision of normal extent; fundus oculi normal; sphincter functions normal, except for slight slowness in micturition, which, prisoner states, has always troubled him. Digestive and other functions normal. Memory and judgment a little defective. Emotional tone optimistic.

OBS. 4.—J. L—, æt. 30, gardener. Convicted of indecent exposure.

Beyond slight tremulousness presented nothing abnormal on reception. Stated that on the previous day he left work about 5.30 p.m., and meeting some acquaintances went with them to a public-house where he stayed "a long time," at least over an hour and a half; he does not recollect leaving the public-house, nor does he recall anything of his movements until he was accosted by a policeman accompanied by a lady who said, "That's your man, officer." He was taken to the station, it being then a few minutes past 9 p.m., and the lady stated that he met her in the road and deliberately exposed his penis, making some indistinct remark. The place where this occurred was on the direct line from the public-house to prisoner's home, and about a quarter of an hour's walk from the former. Prisoner voluntarily adds that he has twice before been charged with the same offence under almost identical conditions. In these cases also he alleges drunkenness and amnesia. His version of the police evidence in the present instance is correct.

Prisoner is the fourth of eight children of healthy parents. There is nothing of note in the family history, or in prisoner's personal antecedents, except an obscure enteric disorder in infancy and a head injury (without loss of consciousness) in boyhood. He has worked all his life as a gardener, and has been in steady employment. A teetotaler up to twenty-three years of age, he then drank heavily after a love disappointment, and since that time has been intermittently intemperate, always from convivial motives.

From the outset of his drinking habits he has been peculiarly susceptible to alcohol, five or six glasses of beer bringing him to a condition of ambulatory automatism. In this state he is, he has been told, fairly coherent, though a good deal more talkative than usual. It has occurred to him in this phase to make gardening engagements which he has afterwards been quite unable to recall. Though his amnesia is usually complete, a striking impression, *e. g.*, the vigorous exhortation of a policeman, will often remain in his memory.

As regards his sexual history, he masturbated moderately as a boy, practised normal coitus from the age of twenty-one, and has been married for the last two years. Alcohol does not, he says, increase desire, nor does it lead to any sexual preoccupation in speech. He denies all exhibitionist tendencies when sober, and his erotic dreams are associated with images of coitus, never of exhibition. He is emotionally unstable, but of very fair intelligence. He presents no signs of alcoholism, and no stigmata of hysteria.

OBS. 5.—J. T—, æt. 54, gardener. Convicted of malicious damage to a fire-alarm.

From the police evidence it appeared that the firemen, going in response to a call to Paddington alarm station, found prisoner seated beside the alarm in a dazed condition, unable or unwilling to give any explanation of his conduct; they supposed that he was drunk.

On reception into prison he was a little confused as to time and place, spoke with some difficulty of articulation, and showed a marked tendency to use periphrasis: said he "did not know" why he broke the fire-alarm, that he "was afraid of something;" he answered questions

with some slowness, but frankly and relevantly. Gait, writing, etc., were normal. There were no signs of chronic alcoholism.

After a night's rest he was much clearer, but still appeared a little aphasic, *e. g.*, had some difficulty in naming familiar plants in the garden. A few days later seemed practically normal, except that he complained still of some difficulty in articulation and of some fatigue in continued thought.

There was nothing of note in the family history; patient himself had enjoyed excellent health up to the present. A skilled gardener, he has always been in good work. He drinks very moderately, taking about a pint of beer a day, and hardly ever touching spirits. He has got drunk "a couple of times," his intoxication being of the ordinary type.

He states that he remembers going in the morning to a nurseryman to arrange about work, returning to Waterloo, and going on in the afternoon to Covent Garden. From that time he has no clear memory till he found himself in the police van on his way to prison, and asked where he was and how he came to be in custody. In the interval of obscured consciousness, which lasted about twenty-six hours, he can just recall the act of breaking the fire-alarm; he does not know the time or place of this occurrence, nor can he even say whether it was day or night; he only remembers that as he broke the glass he had a feeling that "something was going to happen," that he would be safe if someone came, and he recollects seeing a man in a brass helmet approach. Before and after that his memory is a blank.

Careful examination of the nervous system fails to show any defect, except that memory for recent impressions is a trifle weak, and that attention is readily fatigued. Motor power is normal; dynamometer gives pressure of 87 k. with right, 79 k. with left hand, a dynamometric index ($= \frac{\text{Left}}{\text{Right}} \times 100$) of 91, which is above the average for men of his age and education; writing is clear and firm. Sensation, general and special, normal; reflexes normal.

Remarks.—The points which I desire specially to discuss in the light of these cases are the following:—(a) Conditions which predispose to the occurrence of automatism in alcoholic intoxication; (b) character of the defect of memory in the automatic phase; (c) conditions which influence conduct during the phase.

(a) *Conditions which predispose to automatism in alcoholic intoxication.*—An element of cerebral automatism belongs of course to the common phenomena of intoxication by alcohol. When, however, the symptom develops beyond the rudimentary stage to the prolonged dream-state which we have here in view, the cause is generally to be sought in some nervous abnormality in the intoxicated subject. Crothers lays it down in one of his earliest papers on the question that "this trance condition will

always be found associated with a peculiar neurotic state, either induced by alcohol, or existing before alcohol was used,"(1). The soundness of this opinion has been supported by all subsequent experience. When distinct automatism develops under the influence of alcohol, it may almost be taken for certain that the individual is a chronic drunkard, or that he presents some definite evidence of instability of brain. One of the cases in this paper (Obs. 4) is one of the nearest approaches to an exception that I have yet come across; and in that case, despite the absence of the more usual predisposing conditions—for the head injury in childhood seems to have been trivial,—yet the patient's emotionalism, the sentimental origin of his inebriety, and his sexual conduct, all indicate some degree of mental abnormality.

As a rule, however, the neuropathic condition is a good deal more definite. Its different causes, in the order of their numerical importance, would rank in my experience as follows:—Chronicity of intoxication; epilepsy or epileptic heredity; head injury; insane or alcoholic hereditary degeneracy; certain acute infectious diseases, notably typhoid and influenza; syphilis. Very commonly more than one of these causes are operative in a given case, but most of them, if not all, seem to be capable singly of creating the special predisposition to pathological drunkenness. An exception ought perhaps to be made for syphilis; personally, at least, I have not yet seen any case of alcoholic automatism in which it could be regarded as the sole neuropathic cause, but instances are not infrequent in which it appears to be an important co-operating influence, determining, for example, in habitual drinkers a rather earlier development of automatism. It may possibly have had some such influence in Obs. 2, and also in Obs. 3, where, though there was no history of syphilis, the pupillary symptoms were suspicious.

Epilepsy is of course, in a medico-legal aspect, a peculiarly important predisposer to automatism. Its influence is well illustrated in Obs. 1, in connection with which it may be specially noted that the dream-consciousness was related to the intoxication, and not to the epileptic fits. Epilepsy of traumatic origin seems peculiarly to predispose to automatism under alcohol.

(b) *Character of memory defect in automatic phase.*—Special importance attaches to the study of this question, since it is in the disorder of memory that the main evidence of the automatic

condition is to be found. The inquiry is, however, attended with a good deal of difficulty, more even than is presented by the study of the automatism of epilepsy. The most important cause of this difficulty is that in alcoholic cases the automatic phase is, as a rule, gradual and not abrupt in its onset and termination, and is moreover subject to modifications from additional doses of the intoxicant. To avoid fallacy, accordingly, one must be able to exclude this intercurrent influence, and one must leave out of account the transitional conditions at the beginning and end of the dream-state.

Considered with these limitations, alcoholic automatism has, as has very often been noted, a close resemblance, at least in a good many cases, with the automatism of epilepsy.

In the latter disease it is of course the rule that there is total amnesia for the period of the automatic state. It is, however, a rule that admits of a good many exceptions; a partial retention of memory in the automatic phase is by no means rare, and illustrative cases are fairly numerous in medical literature, especially of late years. In alcoholic automatism also, in the majority of cases there is total amnesia; but the proportion of instances with partial memory appears to be higher than in epilepsy. For example, in a series of twenty-four personal observations of automatic suicidal attempts by female inebriates, specially noted from this point of view, there were as many as four cases of incomplete as against twenty of total amnesia.

The cases of complete absence of memory do not call for special remark here. The problems they present are practically the same as in the corresponding class of epileptics. Our interest centres in the more difficult cases where there is a more or less vague and partial memory of the incidents in the dream-phase.

The first and most important point to note is the sort of impressions that are retained in this condition. Any impression may be so retained, but I think it may be stated, at least provisionally, as a general rule that in any case where there is partial memory, a very vivid impression with intense emotional agitation will certainly persist.

The limitation of the cases recorded in the present paper to instances of socially indifferent conduct makes them irrelevant on this point; but the rule has been constant in my experience

of suicidal and homicidal impulse. The suspicion of suicidal intent in Obs. 1 is too remote to be considered in this connection. The normal condition of things in the graver class of cases is shown in the non-alcoholic Obs. 5, where the only traces left in the patient's memory refer precisely to the emotional distress and the impulsive act arising out of it. One should certainly view with extreme suspicion an allegation of amnesia referring to serious criminal acts when trivial incidents deep in the supposed automatic phase are remembered.

Another point of considerable importance is that impressions may be recalled very soon after the automatic phase, or may be revivable in consciousness towards the end of the phase, but may subsequently lapse totally from memory. This has been noted also in cases of epileptic automatism (Samt) (2), and has then been sometimes attributed to the occurrence of a second fit. In alcoholic cases, however, an analogous explanation is not admissible; the phenomenon may be observed in circumstances where further intoxication can be absolutely excluded. Obs. 1 and 3 in this paper are cases in point: in the first the patient when seen on reception offers an explanation of the scratch on his neck, and subsequently knows nothing either of the scratch or of his own earlier account of its origin. In Obs. 3 the patient similarly shows in his cross-examination of the messenger boy a knowledge of facts occurring in the automatic phase which he afterwards forgets altogether, though remembering the questions he put regarding these facts. The point has an obviously important bearing on medico-legal practice; not infrequently it happens that in cases of alcoholic homicide the murderer immediately after the crime makes some remark which apparently implies premeditation and conscious motive, but subsequently alleges total amnesia of his act. In a case, for instance, mentioned in Maschka's *Handbuch*, the murderer, after killing his victim, said to his companions, "Don't tell any one about this;" later on he professed to have no memory whatever of the offence. Judging by analogy from the cases reported above, one must admit the possibility of such amnesia being quite genuine, despite the earlier evidence of memory.

Another question of some moment is whether the state of memory is similar in different attacks in the same individual. In epilepsy it appears to be usually so, but exceptions are met with; in one observation, for example, an epileptic who on two

occasions had committed acts of arson in the automatic state was able to recall the circumstances in one instance, but was totally amnesic with regard to the other (3). In alcoholic automatism variations in this respect appear to be fairly frequent, even apart from ascertainable differences in the nature or amount of the intoxicant consumed on the different occasions. Cases in which chronicity of poisoning is the chief or sole predisposition to the occurrence of automatism are particularly liable to show this inconsistency ; and in such cases the general tendency is for phases with total amnesia to occur earlier, phases with partial memory to occur later in the subject's alcoholic career. One sees this not infrequently, for instance, in the repeated suicidal attempts of chronic alcoholics.

(c) *Conditions which influence conduct during the automatic phase.*—Not less than in regard of the condition of memory, opinion has changed a good deal respecting the possibilities of conduct in the cerebral automatism of epilepsy. Clinical observation has shown often enough that the epileptic dream-state, besides acts which are habitual, imperfect, and inappropriate, admits also of conduct which is unfamiliar, elaborately co-ordinated, and hardly to be distinguished in appearance from fully purposive action.

In the automatism related to alcoholic intoxication seemingly deliberate conduct of this sort is even more frequent. It is therefore a matter of interest to determine the conditions which govern the nature and direction of such acts. Unfortunately in any given case only a very small part of the many influences concerned can, as a rule, be traced out, and even these cannot usually be established with more than an approach to accuracy. Through the obscurity, however, a few broad facts may be discerned with tolerable clearness, and they are of some practical value as guides in estimating the probabilities of conduct in such cases.

The conditions which govern impulse and thought in dream-states are thus formulated by Maudsley :—“(a) Impressions made on sense from without the body ; (b) internal impressions from the viscera and other organs of the body ; (c) stimuli arising from the state of the blood, both as regards supply and composition ; (d) the exhausted effects of recent experiences, whereby lately vibrating parts are prone to be stirred easily into renewed vibration ; and (e) the proclivities of the mental

organisation, as determined by hereditary causes and the special experiences of life."

Considering these conditions in their bearing on the impulses in alcoholic automatism, one may distinguish two categories of cases, *vis.*, those in which the organic stimuli that make up the *cœnæsthesis* are normal, and those in which they are disordered.

In the former category of cases, where the emotional tone is optimistic or indifferent, the character of conduct presents a generally acquisitive tendency, and is more likely to be influenced by intercurrent impressions or by the residues of quite recent experiences. The cases recorded here are instances of this kind; in all of them there is a predominance of the cerebral symptoms of alcoholism, with a relative immunity from its peripheral disorders; and correspondingly their actions are expansive or neutral. The pertinacious efforts to get into the employer's shop in Obs. 1, the *sans-gêne* in the satisfaction of the need to urinate in Obs. 2, the repeated thefts and the efforts to perform difficult and unfamiliar feats in Obs. 3, all indicate a relative optimism of mood. And in Obs. 4, whatever view be taken of its more complex problems, the emotional state is similar.

In the second category of cases, on the other hand, where, either through original temperament or through the organic disorders of chronic poisoning, the affective tone has got a pathological set to pessimism, the impulses tend to be destructive, and the action of extrinsic impressions is small and limited to influencing the direction in which the impulse fulfils itself. To this category, of course, the greater number of cases of alcoholic automatism belong; pessimism is the more general rule in the chronic intoxications, and it is also the more frequent mood in the degenerate, in whom the native deformity of organisation seems to be expressed no less in disorder of the processes that underlie *cœnæsthesis* than in the discord of the more complex intellectual combinations. This aspect of alcoholism I have discussed at length in other papers published in this JOURNAL,(4) and I need not dwell on it further now except to reiterate the practical point that the fixity of the morbid condition in which the impulse has its origin is likely to give to action in the automatic phase a continuity with that in the waking-consciousness which is easily construed into

evidence of premeditation. In the alcoholic, threats before murder by no means exclude automatism.

Diagnosis.—To conclude these remarks one may summarise as follows the points of most importance in arriving at an opinion in a case of alleged alcoholic automatism :

(1) Existence of one or more of the neuropathic predispositions to pathological drunkenness.

(2) Previous occurrence of automatism under the influence of alcohol.

(3) Amnesia during the automatic phase, or, if amnesia be incomplete, then retention of the emotionally keenest impressions more than of the indifferent, other things being equal.

(4) Demeanour of the agent.

(5) Character of the act.

Of these points, the last two may have, of course, a very great positive value, enough in fact at once to fix the diagnosis. The existence of total amnesia, again, is conclusive proof of automatism, but, as we have seen, the difficult cases are just those, by no means rare, where the absence of memory is incomplete. The differential mode of memory is, I believe, a valuable test in such cases, but the instances to which it can be confidently applied are few. The first two points, on the other hand, are comparatively easy of determination, have a considerable positive value and a very high negative value. The absence of a definite cause of neuropathic predisposition, and of a history of similar reaction to alcohol on previous occasions, should go far to decide against the theory of automatism in a criminal case.

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Communicated Insanity, (Folie à deux, folie simultanée) occurring in Mother and Daughter. By JOHN R. LORD, M.B., Senior Assistant Medical Officer, London County Asylum, Bexley, Kent.

THE comparative rareness of good clinical types of communicated insanity is a sufficient apology for occupying valuable space in recording two such cases which have recently come under observation.

Psychoses occurring in several members of the same family within a short period of time are not uncommon, but it is rare that what apparently is true contagion occurs, in which one person infects another with practically the same mental symptoms. Another view which can be taken is that the symptoms arise simultaneously, but on close analysis of the cases to be recorded this would appear not to be so.

It seems plain that the mother was the first to manifest symptoms. She very quickly infected her daughter, helped probably by a similarity of mentalisation and temperament. The network of delusions which is a prominent symptom in both cases was probably elaborated between them—a double contagion, each infecting the other.

The mental disorder took the form of *paranoia chronica*—a progressive systematisation of morbid ideas, the outcome of an equally progressive perversion of reasoning powers and decay of judgment, with little or no affective disturbance.

In the cases I now record, there is a strong similarity almost a complete identity as regards the symptoms manifested, and whatever were their original mental and personal characteristics there is now but little difference. General manner, to some extent the tone of voice, and way of speaking too, are practically alike. They are entirely wrapped up in each other, a deep-seated regard without any effusiveness, calm and serious, united by years of persecution which to them is as real as any event in their lives. The manner in which they consult each other and defer to each other's opinion is instructive as regards the evolution of their delusional state. They care but little where they are so long as they are together, and become anxious and unhappy when separated. They even tend to dress alike, and though there is a difference in physical characteristics and expressions when closely looked at, yet superficially

there is a resemblance so strong that their real relationship to each other could never be mistaken. They have very little mental life outside their imaginary persecution, which seems almost entirely to exclude other trains of thought.

I now give their two stories, which were obtained at separate interviews. The method of examination adopted was to put to each the same previously arranged series of questions. The following is a *résumé* of their answers.

Mother's story.—She complains of persistent annoyance of herself and her daughter for the last twelve years by a Salvation Army officer, who shall be known as Mr. K.

She first met him at Salvation Army meetings, which she attended for a short time, and did not like his ways. He walked about, and would stare and frown at her, so she became suspicious of him. She spoke about it to her daughter, who decided to accompany her the next time. She did so, and was struck by his conduct, remarking to her mother, "I don't like him, you had better cease coming." Patient noticed, a few days after this incident, that when she was walking over the fields near her house she began to feel nervous, and at last became aware of a strange man walking by her side. She felt very uncomfortable and rather astonished at the man's conduct. He would appear and disappear, now he would be in front and then behind, following close upon her heels, and then again by her side. When she got home she complained of this to her daughter, who decided to come and meet her the next time. Her daughter did so and saw the man, who ran away immediately; but she gave chase, and the man sprang over some railings and made his escape. The daughter had time, however, to identify him, and told her mother that it was this Mr. K. Mother had not recognised him, but did so a few days after, when the occurrence was repeated. Persistent annoyance commenced after this. She used to see him every time she went out. He never spoke to her, but used to follow her about—running in front, walking behind, passing and repassing. When she was shopping he would wait outside shop and look through the shop window. It was just the same whether she was accompanied by her daughter or not. Her daughter used to see him too, and he used to act in the same way to her daughter when the latter was out alone. When at home he

used to stand in the doorway. She complained eventually to her husband about him. When out with her husband the same annoyance continued. Her husband apparently did not believe her, but one day he stated that he had caught Mr. K in the doorway and had shook him. Mr. K now set on them a low mob, who made their appearance with Mr. K at their head every time she went out, accompanied or not. This mob used to hustle her in the street, shout and whistle after her, tread on her toes, grin and grimace in her face, hang about the house, and threaten her. Shortly after this she noticed a change in her husband, who became unkind, threatening, and violent. He had joined Mr. K's mob; he tried to murder her; he never actually struck her, but at one time she felt a poker pass her head, and at another time a knife at her throat. He once attacked her daughter, and she had to separate them. After this she separated from her husband. She puts all this down to the evil influence of Mr. K, who had thus separated them, and since this she has had to move about repeatedly to avoid this man. She has lost numerous situations through him; she believes he used to get at her employers. She has gone from district to district, house to house, and everywhere he and his low mob have followed. She was never in one place for long before Mr. K would take up a house near her. She has made repeated complaints to the police. After a complaint to the police he would cease his annoyance for about a week, and then would be as bad as ever. She believes that he bribed the police. She went to Margate and stayed there seven months. He accompanied her and returned with her in the same train. The same happened when she visited Westgate.

She has interviewed the police at Scotland Yard four times, and also visited the Public Prosecutor at the Treasury.

The last time she saw K was on January 15th. He was on foot. He came up to her and grinned in her face. She has never once spoken to him nor he to her.

Her description of K is that of a man of medium height; slimly built; brown eyes and hair, wavy in front; with an evil, vengeful, and malicious look in his eyes. He is in the habit of wearing all sorts of disguises. She has lately been told that Mr. K has been abroad for ten years, but she does not believe it; it is a Salvation Army story to screen him.

She states that she cannot give any reason for Mr. K's conduct.

Daughter's story.—She complains of constant annoyance by Mr. K, a Salvation Army captain or major, extending over a period of twelve years. States also that her mother has been annoyed in the same way.

Her earliest recollection of the affair is her mother's complaint of Mr. K's conduct at the Salvation Army Congress meetings. When he was not preaching he would stand under the clock and stare at her mother secretly. Her mother also complained to her of his conduct at the prayer meetings. Finally her mother, acting on her advice, ceased to go to these gatherings. After she had left, her mother complained of Mr. K following her about in the dark fields. She went to meet her mother and saw Mr. K. He used to appear in the blackest part of the fields. She remembers chasing him.

She is quite sure that Mr. K wanted her mother to take up with him, even after he found that she was married. Because she would not, he commenced his annoyances; he schemed and separated her parents, and her father finally joined Mr. K. He made her mother offers of money, which she has refused.

He commenced to follow her about, also her mother. He would pass and repass her, and look at her intently; also used to wait outside shops. She remembers her father stating that he had caught Mr. K waiting outside the doorway of their house and had shaken him.

About six months after he first commenced to annoy her, he set on them a low mob of boys and girls, who used to sing when passing her in a rowdy fashion, jibe at her, and run against her. They would follow her about, walk four or five abreast, and obstruct the way. They would hang about the house, making a row and threatening her. Mr. K used to lead them; he used to whistle, and then the mob would start.

They annoyed her when she was alone or when with her mother. She used to tell her mother when she saw them, and her mother did the same. Mr. K never spoke personally to either her or her mother. She has been out to service, so has her mother; but they always tried to live within one or two miles of each other.

Mr. K has interfered with her work; undermined her character; made her lose places; broken down her references. She can never keep a young man for him. If she walked out with a lover she would be sure to meet Mr. K, and then in some

way the lover disappeared. He kept low scouts, who informed him whenever she went out.

Persecution has continued and gradually become worse all these years. Whatever distance she moved away he and his mob would follow her. Sometimes she lived with her mother, sometimes she did not, it was just the same—Mr. K soon took up his residence near them; he once followed them to Margate. She describes Mr. K as being of very slim build and under medium height, with black eyes, dark brown, wavy hair and moustache, and of forty-six or forty-seven years of age; dresses in disguise, and has a “maniac’s” look in his eyes. She has been to the police several times; also to Scotland Yard and the Treasury.

She has been told by the magistrate that Mr. K has been in America for ten years. Does not for one moment believe it; this is part of the game; she knows that he bribes the police. Saw him last on January 14th, passing her window on a bicycle.

Inquiries have shown that these women have repeatedly complained to the police for many years; also that the gentleman of whose conduct they complain has been abroad for the last nine years.

I append a brief excerpt of the analysis of their physical and mental symptoms on admission found in the Clinical Records of the Asylum, and in doing so I have to thank Dr. Stansfield for permission to publish their cases.

R. W—, female, æt. 46, admitted January 29th, 1904, married, needleworker.

Physical state.—General bodily condition somewhat impaired, fairly nourished. Some signs of early approach of senility. Cranial index 76·3; minor degenerative stigmata present; contented but thoughtful expression. Motor impairment *nil*; slight intention tremors of face, lips, and hands. Co-ordination, station, gait, and sensation normal. Simple hypermetropic astigmatism; V. = $\frac{5}{8}$; pupils normal; fundus of eye normal. Definite but early signs of arterio-sclerosis and well-marked emphysema. Old striæ gravid. Catamenia irregular. Urine normal.

Mental state.—Attention is normal. No clouding of consciousness. Orientation correct, also identification. Comprehension and reaction good. Stupor, catalepsy, stereotypy, automatism, etc., *nil*. Memory apparently good; probably some fabrications and falsifications in her story. Ideation active. No retardation. Coherence maintained. Reasoning powers poor; judgment very impaired. Has systematised delusions of persecution, associated with apperceptive illusions of sight and hearing. Fairly rational on most subjects, but her mental outlook is

clouded by her delusions. Emotional attitude fairly normal. Not impulsive; not erotic. No obsessions; not resistive or hostile; not restless. Attends to personal wants. Ought to do light work. Religiosity not markedly in evidence. Sense of propriety good; no lewdness. No fantasies of dress, but hair is worn in a peculiar way, and her eyebrows were pencilled on admission, although she denies all knowledge of this. Regard for her daughter almost a worship.—J. R. L.

E. W—, female æt. 28, admitted January 29th, 1904, single, needle-worker.

Physical state.—General bodily condition good, fairly nourished. Cranial index 72·9; long, rather pointed features, good-shaped face; high and narrow palate; pleasant and contented expression, but of a generally neurotic appearance. Motor impairment *nil*; tremors *nil*. Co-ordination, station, gait, and sensation not impaired. V. = $\frac{4}{5}$; pupils normal; fundus normal. No signs of arterio-degeneration; circulation, alimentary, and respiratory system normal. No striae gravid. Catamenia regular. Urine normal.

Mental state.—Attention normal; comprehension and reaction good. No clouding of consciousness. Orientation correct, also identification. Stupor, catalepsy, stereotypy, automatism, etc., *nil*. Memory apparently acute; falsifications and fabrications probable. Ideation active. No retardation. Is coherent. Reasoning powers poor; judgment very impaired. Tendency to suspicions and irrationality generally. Has systematised delusions of persecution associated with apperceptive illusions of sight and hearing. Psycho-motor activity not morbidly increased. No fantasies of dress. Emotional attitude one of calm content; appears somewhat erotic and self-conscious. Not hostile or resistive. Manners good, no loss of propriety, no lewdness. No obsessions. Not impulsive in any way. Ought to work. Quite able to attend to her own wants. Religiosity not in evidence. Regard for mother very great; seems absorbed in her.—J. R. L.

It has been impossible to obtain any family history of these cases, but both mother and daughter deny any psychopathic or other taint in the family. They have never been in asylums before. There is an absence of any of the usual causes—stress, drink, syphilis, etc.

A Case of Epilepsy: Cessation of Fits under Salicin.

By W. J. VINCENT, M.B., Assistant Medical Officer, Wadsley Asylum.

THE following notes on a case of epilepsy may perhaps be of interest:

R. C—, a lad æt. 14, was admitted into the asylum suffering from epilepsy, with restlessness and loss of control, necessitating asylum care

and supervision. The patient was reported to have had many fits both by day and night, and to have recently become vicious, mischievous, troublesome, and unmanageable. The fits began at about the age of ten years, the cause being unknown. He had measles five years and typhoid two years before the onset of the seizures. Has not had scarlet fever. The lad had been under treatment for the seizures, but steadily became worse, and treatment had consequently been discontinued.

On admission into the asylum on March 15th, 1902, the patient was found to be a fairly well-nourished lad. He was quiet and docile, coherent in his conversation, showed a fairly acute memory, and was generally orderly and rational in his conduct. A few days after admission he had three epileptic fits, and soon developed frequent nocturnal and diurnal seizures, both major and minor forms occurring, the latter in excess—on an average about one major to ten minor. Mentally he soon showed loss of control, becoming very restless and mischievous, spiteful towards others, sullen, irritable, and quarrelsome. The seizures and restlessness continuing, he was put on chloral and bromide of potassium; and subsequently various drugs were tried, none of which had any effect in checking the seizures—rather, indeed, tending to increase their frequency. Bromide of potassium, chloral, hyoscine, belladonna, and other drugs were tried in succession, and in various combinations, all without diminishing the seizures or influencing the mental state, the lad remaining exceedingly troublesome, mischievous, and difficult to manage.

During the month of April, 1902, he had 4 diurnal and 158 nocturnal seizures, being the smallest number recorded in a month. During January, 1903, the number had increased to 38 diurnals and 273 nocturnals. The patient had somewhat fewer fits when taking no drugs, but, on the other hand, was practically unmanageable, except in a side-room or under special observation.

The effect of the various drugs upon the seizures can be seen in the accompanying table, in which the average number of fits occurring daily is shown, and the time during which the drugs were given. Many drugs are seen to have apparently increased the frequency of the seizures, but an apparent decrease is seen under antipyrine, the fits increasing again when the drug was discontinued. The general effect of potassium bromide was to increase the number of fits, notably so when combined with gelsemium, but most markedly when given with potassium acetate. In combination with hyoscine, too, the seizures were more frequent, but when given with chloral they were certainly less frequent and less severe.

During the whole of September and part of October no drugs were given, during which period the fits somewhat increased in frequency, the daily average being 8.2.

The case, however, seemed to be going from bad to worse, the patient becoming more feeble, and after a series of seizures becoming partially aphasic, articulation being much interfered with, and muscular weakness extreme, at times necessitating confinement to bed. Subsequently, acting on the assumption that a ⁽¹⁾ toxæmic state might underlie and be responsible for the seizures, diuretic drugs were given—a mixture con-

	Average of	4·2 fts per diem.
Chloral Hydras, gr. x; Pot. Brom., gr. xx. Thrice daily	" 11 "	6·5 "
Drugs discontinued	" " "	" " "
Liq. Trinitrini, m℥ij. Thrice daily	" 9 "	6·2 "
Pot. Brom., gr. xxx. Thrice daily	" 22 "	6·0 "
Drugs discontinued	" 6 "	6·5 "
Tr. Belladonna, m v. Thrice daily	" 10 "	7·0 "
Hyoscin. Hydrobrom., gr. r℥ss. Thrice daily	" 8 "	7·1 "
Antipyrine, gr. x. At night	" 7 "	4·4 "
Drugs discontinued	" 19 "	7·7 "
Chloral Hydras, gr. x. Thrice daily	" 4 "	9·2 "
Pot. Brom., gr. xxx; Hyoscin. Hydrobrom., gr. r℥ss. Thrice daily	" 5 "	8·0 "
Drugs discontinued	" 65 "	8·2 "
Pot. Brom., gr. xx; Tr. Gelsemii, m x. Thrice daily	" 5 "	11·6 "
Antipyrine, gr. x; Sodii Salicyl., gr. xv; Pot. Bicarb., gr. x. Every six hours	" 7 "	9·3 "
Drugs discontinued	" 25 "	9·6 "
Mist. Diuretica.(1) Four times daily	" 7 "	9·6 "
Ditto, with Tr. of Digitalis, m vj. Thrice daily and twice at night	" 20 "	5·5 "
Ditto, Digitalis discontinued. Thrice daily and twice at night	" 9 "	5·8 "
Ditto, with Pot. Brom., gr. xx. Thrice daily and twice at night	" 11 "	6·5 "
Ditto, with Solution of Nitro-glycerine, m℥ij. Thrice daily and twice at night	" 9 "	7·1 "
Pot. Nitrate, gr. x, with Sp. Ether. Nit. and Dec. Scopolari. Thrice daily and twice at night	" 9 "	12·5 "
Pot. Acetate, gr. x; Pot. Brom., gr. xx. Thrice daily and twice at night	" 7 "	18·3 "
Salicin, gr. v, with Sp. Ether. Nit. and Liq. Ammon. Aëstatis. Thrice daily	" 5 "	8·3 "
Ditto. Thrice daily and twice at night	—	Fits ceased.
Patient at present taking Salicin, gr. v, with Bromide of Sodium, gr. x. A single dose at bedtime	—	No fits.

(11) *Mistura Diuretica* contains Pot. Acetatis, Acet. Scillaz, Sp. Ether Nitrosi, Dec. Scoparii.

taining potassium acetate, squills, spirit of nitrous ether, and decoction of scopolarium.

For the first time since the admission of the patient, he had no fits for three days and three nights; the fourth night he had one minor seizure, and then the fits gradually but steadily increased. Digitalis, potassium bromide, and nitro-glycerine were added successively to the diuretic mixture, the fits, however, steadily increasing. Under potassium nitrate, with spirit of nitrous ether and scopolarium, and also with potassium acetate, combined with potassium bromide, there was a sudden and alarming increase in the seizures. The patient was then put on salicin (gr. v thrice daily), with spirit of nitrous ether and solution of ammonium acetate. The seizures began to decrease, and on pressing the drugs (salicin gr. v thrice daily and twice during the night) they ceased somewhat suddenly. Mental improvement soon followed, and steady progress made.

The patient having had no fits for six weeks or so, the spirit of nitrous ether and solution of ammonium acetate were discontinued, salicin alone being given, and the amount gradually reduced until a single dose of five grains was given at bedtime.

The patient, having been free from fits for nearly two months, was discharged, but is still under treatment, and is now taking five grains of salicin with ten grains of sodium bromide at bedtime.

Up to the present time, nine months after the fits ceased, there has been no return of the seizures, and the patient is keeping well, and in good health and condition.

More recently a number of epileptic patients have been tried with salicin (alone and in combination with bromides), in none of which, however, has there been a cessation of the fits; but the general result justifies a more extended trial in those cases in which the bromides have proved ineffectual.

(¹) Gowers, in Clifford Allbutt's *System of Medicine*, says, under "Toxæmic Epilepsy," "It is possible that some chronic blood states, however, give rise to fits quite similar in character and course to those of idiopathic epilepsy."—(²) Haig's opinion, expressed in his book (*Uric Acid in Causation of Disease*), that epilepsy may be associated with uric acid, is of interest in relation with this case.

Cerebral Aneurysm of remarkable size, exhibited at the April (1903) Meeting of the Northern and Midland Division; with notes on the case. By D. RICE, M.R.C.S., L.R.C.P., Senior Assistant Medical Officer, Cheddleton Asylum, Leek, Staffs.

E. P—, female, æt. 65, admitted October 8th, 1902.

Family history.—No history of insanity, epilepsy, alcoholism, or neurosis.

Personal history.—Patient has only been employed in domestic work, having been in service until she married. Menses commenced at the

age of fifteen, and were always profuse, frequent, and painful. She was married at twenty-one, and never became pregnant. Fits commenced rather less than a year after marriage, were nocturnal rather than diurnal, often occurred in twos and threes, and at intervals of never many days. Menstruation ceased at forty-five, and she was then entirely free from fits for twelve years. During the last ten years she has had an occasional fit, but only very infrequently; during the same period, roughly, she has been gradually losing her sight.

Mental symptoms.—She has been “going funny in her head” for about eight years, becoming full of whims, short-tempered, restless at night, and latterly violent in conduct; has become gradually worse, more markedly so during the past week.

Condition on admission.—She was feeble and shaky, restless, unconscious of her surroundings, constantly calling for “Ann,” entirely devoid of attentive power; pupils circular, with faint reflex to light, none to accommodation; knee-jerks moderately brisk; had double mitral disease and a much dilated heart.

She continued in a very restless state, requiring ceaseless attention to prevent accident, until about twenty-four hours before death, which occurred in the early hours of October 17th.

Post-mortem.—The skull-cap is much thickened, measuring 8 mm. in frontal, 6 mm. in temporal, and 7 mm. in occipital region, and extremely dense. Dura mater much thickened, and adherent to the frontal bone over a large area; in the dura mater, under the right side of the frontal bone, and taking an oblique direction forwards and inwards, its centre about 2.5 cm. in front of the coronal suture and 4.5 cm. from the middle line, is a plaque of bone 1.4 cm. long by 0.5 cm. broad; no subdural membrane; vessels markedly atheromatous. Brain heavy, rounded, and compact, showing some atrophy in both parietal regions. An aneurysm of the right anterior cerebral artery presses forwards into the right orbital convolution, which is flattened out over its lower aspect; posteriorly it presses upon and flattens out the optic chiasma and right optic nerve, which have the appearance of a dirty, greenish-yellow jelly; the left nerve escapes pressure and is of normal appearance. The aneurysm is filled, except at its uppermost part, through which a probe passes from the internal carotid into the anterior cerebral artery, with well-laminated brown clot, streaked here and there with white layers. The clot, when shelled out, measures 3.4 cm. antero-posteriorly, 3.2 cm. vertically, and 2.9 cm. transversely, and weighs 20.3 grms. The heart is much hypertrophied and dilated, weighing 425 grms.; the mitral valve shows advanced double disease, and the aortic valves and base of the aorta are markedly atheromatous. Kidneys cirrhotic. Five small subperitoneal fibroids of the uterus, none more than 1.5 cm. in diameter. Large scar on the inner aspect of the left nympha.

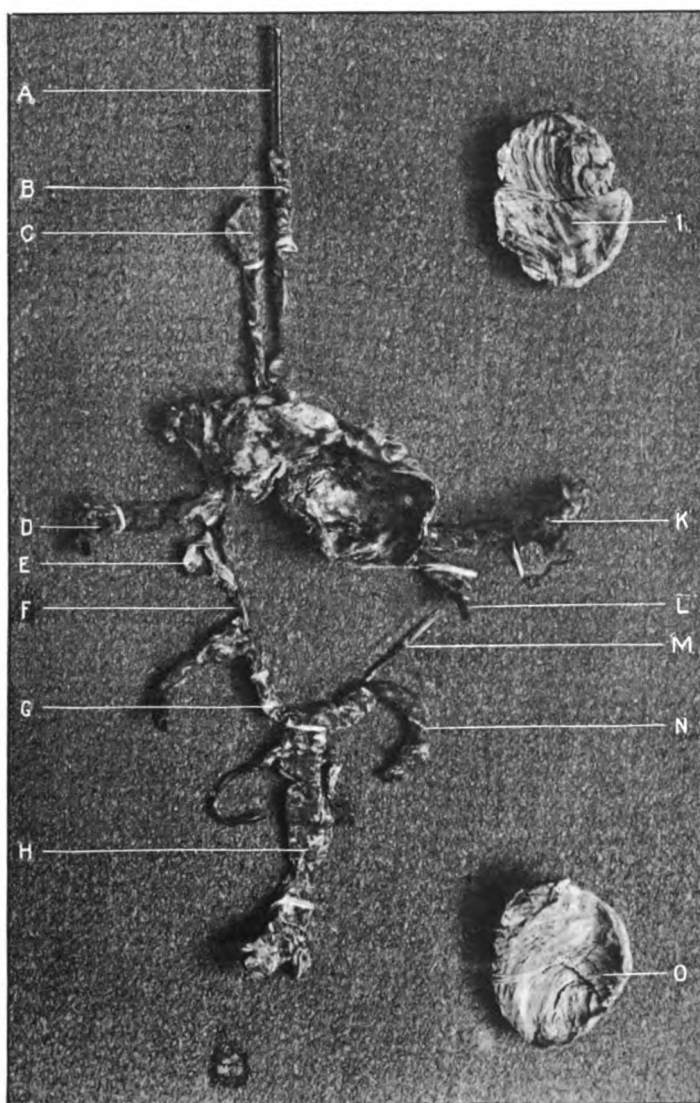
Notes.—Mott (1) speaks of cerebral aneurysms “varying in size from a pea to a walnut,” and records one “the size of a large filbert;” Tooth (2) says they “vary in size from a pin’s head to a pea, and sometimes much larger—as large as a small

DESCRIPTION OF PLATE

Illustrating Mr. RICE's Case on Cerebral Aneurysm of Remarkable Size.

A, Probe. B, Right anterior cerebral. C, Left anterior cerebral. D, Left middle cerebral. E, Left internal carotid. F, Left posterior communicating. G, Left posterior cerebral. H, Basilar. I, Half the clot. K, Right middle cerebral; L, Right internal carotid. M, Right posterior communicating. N, Right posterior cerebral. O, Half the clot.

NOTE.—The arteries corresponding to one another on the two sides, with the exception of the posterior communicating (which on the right side has been torn in mounting), are of practically the same size, so that there cannot have been any considerable degree of pressure by the aneurysm itself to have caused the spontaneous cure.



To illustrate Mr. Rice's case.

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chestnut in one case (Bastian);" Shaw (3) records an aneurysm of the internal carotid artery "the size of a walnut;" but I am unable to find, in the books to which I have access, any record of so large an aneurysm of the anterior cerebral artery as this specimen, although according to Gowers (4) that artery ranks third to the middle cerebral and internal carotid in frequency of the affection among intra-cranial arteries.

The fits appear to have been evidence of protest on the part of the unsatisfied sexual organs, as is borne out by the date of their onset and their cessation for some years after the menopause, to recommence later on when the cerebral arteries degenerated.

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Clinical Note on a Case of Obstinate Constipation due to Collection of Plum-stones in the Rectum. By J. OGILVIE VEITCH, M.B., C.M.Edin., Second Assistant Medical Officer, the Asylum, Worcester.

A FEMALE patient, M. W—, in this asylum, suffering from dementia, and who had previously been cleanly in her habits, was noticed by the nurse to soil her clothes daily, and that, although this occurred, she never had a proper movement of the bowels. She was sleepless and restless at night, but complained of no pain, and took her food in a satisfactory manner. This state of affairs had been progressing for about ten days, when it was brought under the notice of her medical attendant. Various purgatives were administered by the mouth, and these proving ineffectual, and on purgative enemata being tried and also proving abortive, a rectal examination was made, when it was discovered that the lower bowel was filled with plum-stones, which were caked with the fæces into a hard mass. These were digitally removed, and numbered about fifty. After this treatment the patient's bowels acted normally. The special feature of this case seems to be the facility with which these stones, considering their size and sharp edges, passed through the whole length of the intestine without giving rise to any serious symptoms.

Occasional Notes.

The Martyrology of Psychiatry.

Under this rubric our contemporary, the *Annales Medico-psychologiques*, tells its readers now and again the tale of a life sacrificed or crippled or endangered through injuries received by physician or attendant from one of our unhappy patients. Many of the lighter events that remind us of the danger in which we live—and even some that are not light—escape unrecorded in France as here. Sometimes when the gravest story has to be told, the reader's eye glistens and his heart beats fast with mingled admiration and regret while he thinks of the noble words *mort sur le champ d'honneur*, more truly applicable to many a member of the healing than of the wounding craft. The thrilling record of martyrdom in the complete sense of the word, however, though fuller than we are apt to remember, is not one to alarm a mind of virile courage. Neither are the injuries threatened by the frenzied deeds of our poor people sufficiently numerous to cloud our souls with apprehension. As in all other men's experience, so in ours, it is not the rare moments, dark or brilliant, deeply stirring the imagination and appealing passionately to the emotions that give our lives their peculiar tone and fix our characters through the inevitable influence of constant repetition: it is the way in which the world bears upon us in the daily routine of our existence, in our common life—

. . . . "Wherein we find
Our happiness, or find it not at all."

The physical hurt we receive from our patients counts small among the annoyances of asylum existence which are so heavy. Uncertainty and yet monotony, immense responsibility with usually very limited power, anxiety without acknowledgment, unceasing harassment of every description, make the dreary picture upon a dark background formed by the popular suspicion with which the practitioners of our specialty are regarded.

These reflections are suggested to us by the remarkable quotation from Falret, senior, given by Dr. Christian in an article in the current (March—April) number of the *Annales Medico-psychologiques*. Falret wrote to Dr. Evrat, who was

then beginning his medical career:—"If, you wish to join asylum work you may make up your mind to a life of suspicion and an existence of toil, for which you will only gain annoyance and will have no reward." Perhaps this suspicion will be always our doom until such time as all the race has reached the summit of the Mount of Humiliation and tasted of the fruit of the knowledge of good and evil. For sure in this world suspicion of those who care for the insane seems ineradicable. And the reason is clear enough. One of the ugliest of the primitive instincts of humanity is its hatred and dread of the mentally unsound. No doubt in the earliest days of racial struggle for existence this instinct served some useful purpose. All the gregarious nomadic animals expel from the herd the damaged member. The stricken wether of the flock, the wounded deer, the shoulder-slipped horse are driven out to starve, if not kicked or gored or trampled to death. The upstart race of men have got so far in development towards a new ideal as to be ashamed of this originally preservative instinct. What are proudly and preposterously called humane feelings are supposed to have quenched it. How strongly it still exists we, who have the best opportunities of knowing, know well. The physician has stood almost alone among the whole bimanous species in fighting against this hideous survival, and has met the usual fate of the pioneer in morals. The hatred and suspicion, which men are now ashamed to avow that they entertain for the insane, they have transferred to those who have the care of the insane, and it is esteemed a merit to hate the doctor and pity the patient, for men do not recognise how they deceive themselves nor distinguish that the modern sentiment is but the obverse of that old unaltered feeling which they formally disavow.

And so the mental physician is regarded to-day much as the keeper of a tea-house used to be in old Japan, and the agreeable consciousness that no cause succeeds without its martyrs is the chief reward for a life of such work and anxiety that even had a man every possible popular support he would not be justified on business principles in undertaking it. Chronic martyrdom, if that phrase may be coined, martyrdom by pin pricks, martyrdom of the Chinese rest-robbing type, martyrdom by breaking a man's career, or by exposing him to the annoyance of senseless and malignant actions at law, or by every form

of abuse which the law of libel will or will not allow, are some of the modes in which crystallises from time to time the strong solution of suspicion that is the element wherein we live. We are familiar with cases illustrating one phase or another of this kind of thing in every country: England, America, New South Wales, Denmark, Italy, etc. Dr. Christian's article in the medico-legal column of the *Annales* to which we have referred, relates a case in which he was charged with homicide through neglect, because a patient whom he had had under his care at the National Asylum of Charenton, who had refused food and who had been artificially fed, subsequently died three weeks after removal to another asylum. The widow of the patient, who had been a brakesman on a railway, claimed £2,000 damages for criminal negligence, affirming in due legal diction that when a patient is unable to take food himself it is the duty of those in charge of him to supply him with food, and to use all the care and skill and art which medical science affords for the purpose. To the statement that the patient actually was artificially fed, it appears to have been answered that the physician's duty is insufficiently performed by the mere introduction of the tube unless he also provokes the movements of deglutition by electricity or with the help of etherisation or chloroform. The *avocat* who pressed this point was surely not abreast of the times. Need we remind our readers that in this country we commonly assist the passage of the œsophageal tube with Röntgen rays, radium emanation, and Christian science? Our colleague feels humiliated that he, who has grown white in the service, should have had the annoyance of answering to such charges—and we sympathise. We further ask, would the most impudent blackmailer have dared to bring such an action against anybody but an asylum physician, one of that body whom general suspicion holds up as a fair mark for the ingenuity of any speculative lawyer?

The present is not the first occasion on which our distinguished colleague of Charenton has been subjected to vexatious action. Some four years ago (the case is recorded in the November—December number of the *Annales* for 1900) an action was taken against him for damages because one of his patients had committed suicide. The history of the patient, who had been several times in the asylum and had never shown any suicidal tendency, and of the event (precipitation under the

wheels of a passing heavily-laden waggon), suggest sudden impulse. At any rate, there was nothing to suggest neglect, and such an occurrence is unhappily common enough. The action, as it chanced, was unsuccessful. There seems, however, to be a tendency just now in France to endeavour to hold medical men responsible for the suicides of their patients. In the article in which Christian records the case last mentioned, he tells of an action taken against a medical man who was cast in damages owing to the suicide of a patient in his *maison de santé*. The case went by default before the first tribunal. Dr. Duhamel of Fontenay-sous-Bois, the gentleman in question, has appealed, however (after the lapse of three years apparently!), and the appellate court has reversed the first decision and fully acquitted him. It is not quite clear whether this final decision was founded on the general merits of the question or on the somewhat dangerous contention of the appellant's counsel that Dr. Duhamel's establishment was merely a *maison de santé* and not an asylum, and that therefore the proprietor was not in a position to adopt the precautions required for the safety of the insane. It is easy to see how hopeless will become the already unhappy lot of the melancholiac if we are to make it the essential feature of his "treatment" that he is to be guarded against any possibility of suicide, and of course this will be the result if society determines that we are to be punished for every suicide occurring among our patients. We are of those who hold that such an effort is bound to fail, and that the return to retrograde methods would actually increase the number of suicides as well as diminish the recovery rate among the survivors.

On the principle discussed above, we cannot wonder should society care little for the interests of the patient when an occasion arises for baiting the doctor.

After-care Association.

The annual meeting of this Association was held at London House, the Bishop of London presiding, and speaking strongly on behalf of the Association.

Dr. Nicolson moved, and Sir John Batty Tuke seconded, the

adoption of the report, the latter giving an admirable illustration of the usefulness of aid in helping recovered persons to re-start in life.

The work of the Association is steadily growing, but even now only 250 persons of the 7000 annually discharged from asylums are aided. There must certainly be a larger number needing aid, who are not reached by after-care.

The oft-repeated suggestion was made that the Association should decentralize; hitherto attempts in this direction have been made by voluntary local secretaries. These have been appointed in many of the large towns, but no great success has hitherto attended these efforts.

The Council, we are informed, has under consideration a scheme for establishing divisional centres, in which a paid agent should be employed: the finding and visiting the homes, obtaining exact information in regard to the characters and capabilities of the patient, the abilities of friends to aid, the form of occupation suitable, and the trustworthiness of the employers with whom the patient is placed, entailing an amount of work, time, patience, and experience which cannot be expected of a voluntary helper.

The income of the Association fell last year to little over £600, and the difficulty of raising funds was well illustrated by this meeting. There was a large room full of well-dressed, interested persons; but, apart from habitual subscribers, little over £8 was raised.

With such limited means the extension of the work by means of new centres becomes a difficulty; but the Association has accumulated a reserve fund, which will enable it to make the attempt if co-operation can be obtained. It would be very desirable that a few suitable cottage homes could be found in each county; and if asylum superintendents would aid in this direction they would greatly enhance the usefulness of the Association.

Private or Pauper?

A question of some interest is under discussion between the authorities of the Chichester Asylum and the Commissioners in Lunacy. The asylum is intended primarily for pauper

patients, for whom the maintenance rate charged to the guardians is the maximum allowed by the Act, *viz.*, fourteen shillings per week. This charge does not, however, cover the whole cost of maintenance, and is supplemented from the county fund. The asylum receives private patients also, and for these it charges twenty-one shillings, presumably making a small profit out of them. The guardians who pay for the pauper patients are entitled, and are bound, to recover from the relatives of these patients as much of the charge of maintenance as these relatives can reasonably be expected to pay. In one case they recover the whole fourteen shillings; and under these circumstances the patient lodges a claim to be removed from the register of pauper patients and entered on the register of private patients, the ground of his claim being that he repays to the guardians the whole charge of his maintenance.

The claim does not appear to us a valid one.

"Private patient" is defined by the Act of 1890 as "a patient who is not a pauper."

"Pauper" is defined as "a person wholly or partly chargeable to a union, county, or borough."

"Expenses of maintenance" are "the reasonable charges of the lodging, maintenance, medicine, clothing, and care" of a patient.

It is contended, first, that since the patient pays only the rate charged for paupers, and not the full rate charged for private patients, he is not entitled to be placed upon the register of the latter. This contention does not appear sound. The asylum authority may charge for private patients "such terms" as it may "think fit." There is nothing in the Act to prevent it from receiving patients upon unremunerative terms if it chooses to do so; and it seems that it is entitled to reduce the charge for private patients, or for any particular private patient, to fourteen shillings or less. The Act does, no doubt, contemplate that private patients will be received at a profit, and, if a patient is received as a private patient at a less rate than his actual cost of maintenance, it would seem that he then becomes "partly chargeable to a county," and thereby takes of necessity the status of a pauper. In the case of the Chichester Asylum, the total cost of maintenance does in fact exceed the fourteen shillings which is paid for the pauper patients, and it would appear that a patient is still "partly chargeable" to the county,

and therefore not entitled to be placed on the register of private patients unless his payment to the asylum authority is at least equal to the cost of his maintenance. The question, however, turns upon the meaning of the word "chargeable," which is not defined in the Act, and may perhaps be open to doubt.

It is unnecessary, however, to decide this point, since there is another ground, which seems incontestable, for holding that the patient is a pauper, even although he repay to the guardians the whole of the rate which they pay to the asylum, and although the rate so paid were sufficient to defray the whole of the cost of maintenance in the asylum. In such a case the asylum authority would be at no charge for the patient, who would no longer be even partly chargeable to the county; but he would still be indebted to—that is, partly chargeable to—the guardians through whom the payment was made. For the whole of the fourteen shillings collected by the guardians from the relatives of the patient would be paid over intact to the asylum authority, leaving nothing in the hands of the guardians to recoup them for the time and trouble and expense involved in collecting and forwarding the money. They would be out of pocket in respect of book-keeping, postage, stationery, and so forth. If it be contended, which I think it cannot rightly be, that these expenses are so small as to be neglectable, and *de minimis non curat lex*, there are other considerations of greater weight. As long as the patient's name is borne upon the books of the guardians as a pauper patient, so long is he entitled to the protection of the guardians. They are bound by law to visit him, either themselves or through their representative. To them he has the right of complaint, and to him they are guardians in the sense that his complaints may be made by them ground of expostulation and remonstrance to the asylum authority. As long as he enjoys these privileges, which come to him gratuitously by reason of his status as a pauper, so long he cannot divest himself of that status. As long as he is borne upon the books of the guardians, and receives from them in consequence gratuitous services of whatever nature, so long he is "chargeable" to the union, and so long he must be considered a pauper.

C. M.

The Drink Question in Ireland.

We had occasion in a recent number to comment upon the superabundance of public-houses in Ireland and on the preposterous power that those who serve the people with strong drink have obtained over their masters. In his recent remarkable book, *Ireland in the New Century*, that very practical patriot, Horace Plunkett, has thrown on the condition of things in the green isle a side-light which is the more illuminating as it comes from a most impartial source. From every page of this book the Vice-President of the Irish Agricultural Department makes it clear that in his opinion want of moral courage, that moral courage which begets self-help, invention, energy, and success, is the bane of his country. Slyly adopting our jargon, he says, "The conclusion has been forced upon me that the Irish mind is suffering from considerable functional derangement, but not, so far as I can discern, from any organic disease." The derangement is asthenia of the moral fibre. For the general treatment of this ailment we must refer to the original work. How it bears upon the drink problem a quotation or two will show. "Our four and a half millions of people, mainly agricultural, have," we are told, "speaking generally, a very low standard of comfort, which they like to attribute to some five or six millions sterling paid as agricultural rent and three millions of alleged over-taxation. They face the situation bravely—and, incidentally, swell the over-taxation—with the help of the thirteen or fourteen millions' worth of alcoholic stimulants which they annually consume." A little further on we find the following statement:—"The indiscriminate granting of [public-house] licences in Ireland, which has resulted in the provision of liquor shops in a proportion to the population larger than is found in any other country, is in itself due mainly to the moral cowardice of magistrates, who do not care to incur local unpopularity by refusing licences for which there is no pretence of any need beyond that of the applicant and his relatives. Not long ago the magistrates of Ireland met in Dublin in order to inaugurate common action in dealing with this scandal. Appropriate resolutions were passed, and much good has already resulted from the meeting, but had the unvarnished truth been admissible, the first, and indeed the only necessary resolution

should have run, 'Resolved that in future we be collectively as brave as we have been individually timid, and that we take heart of grace and carry away from the meeting sufficient strength to do, in the exercise of our functions as the licensing authority, what we have always known to be our plain duty to our country and our God.'

Sir Horace Plunkett's book is dated 1904, and was placed before the reading public in the second month of that year. Only by considering that he is too much absorbed in the cares of his office to take any note of current events can we account for the blazing indiscretion of this last sentence. The Irish magistrates have about as much power of defending themselves in Ireland as the Cherokee Indians have in America. Like the latter they are dispossessed, outnumbered, and unarmed. But what of the Prime Minister of the Government to which Sir Horace Plunkett belongs? Does he deserve no respect, or are his enemies of his own household? On the other hand, if the unvarnished truth be admissible, is it not the plain duty of that high functionary to his country, etc., to recant his recent base submission to the grog-shop interest, and to take heart of grace and be as brave as he has been timid in this question so vitally important to the well-being of the community?

In view of the pledge given to the publicans by Mr. Arthur Balfour last autumn that the powers of refusing licences shall, in the interest of the licencees, be removed from the hands of the magistrates, does Sir Horace Plunkett believe that the extreme of moral cowardice is peculiar to Ireland?

Caution Cards.

The interesting and valuable discussion originated by Dr. Marnan at the last meeting of the South-Western Division is one of many evidences of the good work that the Divisions are performing.

Mechanical routine in the treatment of the most serious danger of mental disease should receive the most stringent criticism in regard to its necessity and the extent of the need.

The primary result of caution cards, as Dr. Marnan points out, is to fix responsibility on the attendant in actual personal

charge of the case, the indirect responsibility of the physician being thereby materially lightened, since, in case of neglect, the whole blame is thrown on the attendant.

Relief of responsibility may, however, be purchased too dearly by loss of freedom in treatment. The patient must be treated both by physician and attendant as suicidal so long as the caution card exists, and the physician is debarred from any relaxation which his experience and judgment might otherwise consider as beneficial. With caution cards the physician may be tempted to rely on the certain punishment of the attendant if he fails in his duty; without them he must be much more assured of the character and reliability of the attendant.

The general percentage of suicides since the adoption of caution cards have not materially decreased, and it would be quite easy to adduce the example of asylums that for a long series of years (prior to the use of caution cards) had no suicides, or suicides very much below the permillage that now obtains. Some of these examples are sufficiently striking to prove that this immunity was not the result of mere chance, but of the conditions of treatment existing in these asylums. Is it not possible that a careful study of these might evidence a system of treatment better even than that which now predominates in England, while so sparingly adopted in Scotland and Ireland?

The primary principle in the treatment of suicidal tendencies ought to be to divert the attention of the patient from the idea, and it is to be feared that the caution-card system, if not necessarily, yet frequently defeats this principle as the patient comes to know all about the card.

Caution cards cannot be regarded as free from drawbacks, and there can be little doubt that this discussion will make men pause before extending their use.

International Home Relief Congress.

We draw special attention to the provisional programme of the International Home Relief Congress, which is to be held in Edinburgh in June. The subjects for discussion are of great importance to those engaged in local administration and the charities of the country. We trust that there will be a successful meeting.

Part II.—Reviews.

A Study of British Genius. By HAVELOCK ELLIS. London: Hurst and Blacket, 1904. Demy 8vo, pp. 300.

In his previous writings the author has especially dealt with subjects already treated by Lombroso, and if he is less bold and less original in his generalisations than the Italian Professor, he has a much firmer grasp of facts. Mr. Ellis discreetly avoids defining the word genius, which he uses merely to signify "high intellectual ability." He presents us with a study of above a thousand eminent British men and women. In an introductory chapter he ingenuously lets us know how he has made the selection. As Möbius used the *Biographie Universelle* for his study of artists, Mr. Ellis has made use of the *Dictionary of British Biography*, which, besides giving a pretty full account of persons honoured with separate notices, also indicates the sources from which further information may be gathered. He began by excluding all those to whom less than three pages were allotted as not in the first rank; but a few more shortly treated, who had shown intellectual ability of a high order, were afterwards added, and villains like Titus Oates and Jeffreys were thrown out. To his list it would be easy to make exceptions. No one man is able to gauge the ability of so many persons in so many fields. The most noteworthy omissions are the great Marquis of Montrose and Thomas Wentworth, Earl of Strafford; while he includes Laud, who, as Principal Baillie wrote, was but a pendicle in Strafford's ear.

He misses out Arbuthnot, Armstrong and Akenside because they are minor writers now little read. Well, take Arbuthnot, an eminent physician, and not thought a minor writer in his own day. We make bold to say that few, indeed, of the writers of the nineteenth century, of whom Mr. Ellis has a big list, will be read 170 years after their demise. We hope that the author may have a second edition to include Robert Brown and Marshall Hall among his eminent scientific men, and add Mountstuart Elphinstone to his list of historians. Nevertheless, the general accuracy of Mr. Ellis's statements shows how carefully he has worked out details. He has read widely on the literature of the subject and does justice to his predecessors in the same fields. He examines most laboriously the remarkable traits in the appearance, character, and life of eminent men. They are either longer or shorter than the average. Some are shortsighted, some stammer, a good many are awkward in their motions, and have an illegible handwriting. In general they are liable to be melancholy, and marry late. A large proportion are unfortunate because the world either neglects or dislikes men of original genius. He has ascertained by diligent research what proportion of eminent men are the eldest or youngest sons in a family, and how many one can write down to the different counties in Britain. Indeed, Mr. Ellis contributes so many particulars of this kind that one

is tempted to exclaim with the mathematician who had listened throughout to a tragedy of Racine—What does all this prove?

Mr. Ellis has found that gout is the disease to which men of genius are peculiarly liable, and he quotes Spencer Wells to the effect that in the absence of hereditary predisposition gout is not easy to produce except in men endowed with a highly organised condition of the nervous system. Mr. Ellis tells his readers that the theory that gout is caused by uric acid no longer receives wide acceptance, and "there is a tendency to regard" (the excess of) "uric acid produced in gout as a symptom rather than a cause." After citing so many papers on gout Mr. Ellis should not have passed over in silence Dr. Haig's well-known book, *Uric Acid as a Factor in the Causation of Disease*, in which he holds that gout is caused by excess of uric acid, and undertakes to produce an arthritis chemically indistinguishable from gout or rheumatism in any member of the profession who is in good general health and will follow his instructions. It is noteworthy that all the eminent men whom Mr. Ellis mentions as sufferers from gout were Englishmen save one (Irish), and all were in good circumstances. As Haig observes, gout is not common in Scotland, where the people do not eat so much animal food nor drink so much beer. The author gives good credit to the ability of Scotchmen, so they may be content with having achieved greatness without "the stimulus of the gouty poison." Mr. Ellis finds that gout occurs in about 5 *per cent.* of his eminent men, whereas he affirms that cases of typical gout seldom form more than 1 *per cent.* of the chronic disorders met with. What we should like to know is the percentage of gout amongst the affluent, for every one knows it is not common amongst the labouring classes. As men seldom die of gout, it will be difficult to arrive at accurate statistics of its prevalence.

Commenting upon the notion that genius is akin to insanity, Mr. Ellis observes that he has not seen any ground to infer that there is any general connection between genius and insanity, or that genius tends to proceed from families in which insanity is prevalent. For while it is certainly true that insanity occurs with unusual frequency among men of genius, it is very rare to find that periods of intellectual ability are combined with periods of insanity; and it is moreover notable that (putting aside senile forms of insanity) the intellectual achievements of those eminent men in whom unquestionable insanity has occurred have rarely been of a very high order. "Insanity," he observes, "is rather a Nemesis of the peculiar intellectual energy of genius exerted at a prolonged high tension than an essential element in the foundation of genius."

Throughout this book, as in other inquiries of the kind about the prevalence of hereditary and other forms of insanity in different groups of men, we recognise the want of a comparative scale. How can we reach an estimate as to whether insanity or nervous disorders are frequent or rare with different families or classes unless we know what is the frequency of these affections in the ordinary population? I have tried to construct a scale amongst some families with whose history I was well acquainted, but these were too few for a safe average.

Dr. Clouston has essayed this task with much greater success. In the annual report of the Royal Edinburgh Asylum for the year

1893 he gives the results of a study of eighty-three families personally known to him. Dr. Clouston found that one half of the families were affected by idiocy, epilepsy, and insanity. He noted some striking cases of hereditary derangement. We should like to have Dr. Clouston's inquiry given in a more extended form. Physicians long in practice would deserve our gratitude if they imitated his example and published the results of their observations of the prevalence of nervous diseases amongst the families known to them.

On the whole this is a well-written book, full of curious information and judicious remarks likely to interest both the psychologist and the educated general reader.

WILLIAM W. IRELAND.

Les Tics et leur Traitement. By HENRY MEIGE and E. FEINDEL.
With a preface by Professor BRISSAUD. Pp. 633. Masson and Co., Paris, 1902.

The authors say that their motive in publishing this book is, firstly, to make known clinical facts which they have observed, and secondly, to endeavour to assign to tics a place among the very numerous varieties of motor troubles which nervous or mental affections engender. Forty pages are devoted to the confidences of a tiqueur, a patient who was a true living compendium of almost all varieties of tics. Much confusion has resulted by various authors confounding the meaning of the words tic and spasm. In order to make their meaning clear, the authors give the following definitions. If there is a motor reaction in which the cerebral cortex does not take and has never taken part, this action is not a tic. If this motor reaction is the consequence of a pathological irritation of some point or other of a bulbo-spinal reflex arc, it is a spasm. A motor reaction in which the cerebral cortex takes or has taken part is not a spasm. If this motor phenomenon is the result of an action in which the cerebral cortex at any moment participates, and presents besides certain pathological distinctive characters, it is a tic. The mental condition of tiqueurs is an infantile one, and the will-power is feeble. Mental and motor instability are generally observed, and fixed ideas, obsessions, and phobias are frequent symptoms. After considering the etiology, pathological anatomy, the motor reaction, and the accessory symptoms observed in tiqueurs, the authors describe no less than twenty-three varieties of tics, each variety being made more plain by illustrative cases. The relations of tics with hysteria, neurasthenia, epilepsy, insanity, and idiocy are examined, and the distinctive characteristics of a tic are shortly described. The diagnosis of tics from spasm, various varieties of chorea, para-myo-clonus multiplex, athetosis, tremors, and professional cramps is fully entered into, as well as the prognosis; with regard to the latter, the authors say that the tic regularly treated can be ameliorated, and even cured. For the treatment of tics, the bromides, valerianate of zinc, and gelsemium in large doses have been tried, as well as injections of morphia, atropine, and curare, and inhalations of chloroform and ether with more or less success.

The diet should be nourishing, and the environment of the patient good, and a tepid bath taken morning and evening will prove useful. Massage and electricity should be made use of, and in a few cases hypnotic suggestion has given good results. The authors do not approve of the surgical treatment of tics, nor orthopædic treatment by means of apparatus, for they find that as soon as the apparatus is removed the movements recommence. They do believe in treatment for rectifying the movements of the tiqueurs. The exercises are of two kinds: one to teach the patient to remain motionless, the other to regulate all his gestures, to make him execute slow, correct, regular movements when commanded to do so. At home these movements must be performed before a looking-glass. The authors prescribe the required movements for various kinds of tics, and are of opinion that in some cases absolute rest in bed night and day is required. To isolate the patient from his family is necessary in cases in which the surroundings militate against his recovery. Finally, firmness, patience, kindness, and good sense are the means to be employed for the cure of the patient; and docility, confidence, and perseverance on the part of the tiqueur. The book will be useful to all medical men who have to treat this affection.

FLETCHER BEACH.

L'Origine dei Fenomeni Psicici. By G. SERGI. Second edition. Turin : Bocca, 1904. Pp. 367, large 8vo. Price 8 lire.
L'Evoluzione Umana. By G. SERGI. Turin : Bocca, 1904. Pp. 283, 8vo. Price 3.50 lire

Professor Sergi, who is one of the most eminent of living anthropologists, and has done much to reform anthropological methods by his famous classification of human skulls on the basis of form, here reminds us that he is also a psychologist. He was, indeed, a psychologist before he was an anthropologist, and these two volumes, somewhat popular in style, are written with the ease and confidence of one whose views are matured and who feels at home in dilating upon a familiar theme. The first book is a revised and enlarged edition of a work which was published some years ago. It is strictly psychological in character, and expounds the author's favourite conception of psychic phenomena as a method of protection for the vital organism, gradually developed in the course of evolution. He is a pronounced monist, and opposed to all forms of animism and neo-vitalism.

In the more recent book the author takes a wider sweep, and briefly considers all the main forms of human activity and the problems of modern civilisation. Professor Sergi has a firm faith in the creed of science and in the future of the human race. Throughout one feels the presence of generous and humanitarian aspirations, and Italian youth, for whom the book is primarily written, may be congratulated on possessing so competent and inspiring a leader into the paths of modern scientific thought.

HAVELOCK ELLIS.

Das Verbrechen und Seine Bekämpfung [Crime and the Methods of Combating it]. By Professor ASCHAFFENBURG. Heidelberg : Carl Winter, 1903. Pp. 246, 8vo.

Two remarkable books dealing with the general problems of criminality from the modern standpoint have already come from Germany within recent years—Kurella's, on the natural history of the criminal, and Baer's, on the criminal in his anthropological relationship. Kurella's and Baer's conclusions are at many points widely divergent. Kurella is an enthusiastic adherent of Lombroso, though he is more critical and more methodical. Baer is violently opposed to Lombroso, and a large part of his book is controversial in character. Aschaffenburg, in the admirable work which he here presents to us, shows himself a partisan on neither side ; he accepts what seems to him good in the teaching of Lombroso, he rejects the rest, having, it is evident, wisely decided that the time has gone by when it was desirable to take sides on these matters, and that controversy is an idle waste of time. Such a position represents a very real advance in the scientific study of criminology.

Dr. Aschaffenburg is excellently equipped for the task he has here undertaken, alike on the scientific side and the practical side. He is one of the brilliant Heidelberg group of alienists, and he dedicates his book to Kraepelin, the greatest living master of scientific psychiatry. For some years he has been physician in chief at the observation department for insane criminals at Halle, and has thus obtained a practical familiarity with criminals.

The scope of his subject is wide, but the book is fairly compact and not overloaded with details. There are three parts: I, The Social Causes of Crime ; II, The Individual Causes of Crime ; III, The Struggle with Crime. Dr. Aschaffenburg adopts the standpoint of Corre, who regards crime as a manifestation which cannot be studied apart from society as a separated product ; it is, as it were, a wound on the social body, and must be approached with the ordinary methods of clinical investigation.

Part i opens with an excellent discussion of the seasonal periodicity of crime—not altogether a social cause, and by some writers classed among the cosmic influences on crime,—and then proceeds to deal with criminality in relation to religious creed. He discusses this question at some length, and comes to the conclusion that creed has very little influence on criminality. The greater criminality of Roman Catholics than of Protestants in some parts of Germany, he points out, may be explained by the fact that the Catholics are mainly found among the lower social classes. He attaches far more importance to alcohol ; he remarks that there are three great centres of alcoholic production in Germany (for beer, for wine, and for spirits), and that all three are highly criminal.

In Part ii the author approaches the much debated question of the nature of the individual factor in criminality, and his treatment of it is admirably judicious and balanced. With every roll of the social vessel, as he expresses it, a few fall overboard ; social causes furnish the impetus to crime, but while the majority can still keep their balance, some are unable to do this, and so go over. What are the characteristics

of the individuals who show this lack of resistance to social stress? Dr. Aschaffenburg finds that they are, physically and mentally, those of degeneration generally. He attaches little importance to the statistics bearing on the heredity of criminal tendencies, on account of the difficulty of eliminating the factor of the environmental influences, but he attaches very great importance to the figures showing the prevalence of weak-mindedness among criminals. Thus Mönkemöller, among 200 boys in a Berlin reformatory, found as many as sixty-eight who were markedly weak-minded, while the rest were so unintelligent that the attempt to impart to them more than the most rudimentary instruction had to be abandoned. At the other end of life the author finds in his own experience that offences against morality, after the age of seventy, are invariably due to senile dementia.

The section dealing with the physical characters of the criminal is not lengthy, and Dr. Aschaffenburg is not inclined to accept a specific criminal type; but as regards the brain and skull, he considers that great weight must be attached to the conclusions of the distinguished Russian brain anatomist, Sernoff, showing that various atavistic anomalies of the brain and skull are specially frequent in criminals.

"Criminality and insanity are plants which spring up from the same soil of physical and mental degeneration." The author found that among 405 prisoners (with sentences of more than six months) under his observation at one time sixty-seven distinctly showed mental defect or disease, some in a high degree. The class of offenders against morality he finds to be specially apt to show mental anomaly; of sixty-seven offenders condemned to prison for this cause, only fifteen were mentally sound, and these exceptions were mostly under the influence of alcohol at the time of the act. Tramps are also an unsound group mentally. It may be added here that the author refuses to accept the conception of moral insanity; in all such cases there is, he believes, some element of intellectual defect.

In the third part, dealing with the question of social hygiene, the author adopts many of Ferri's fundamental ideas. He maintains, in full accord with the positive school of criminologists, that our treatment of crime must rest on the necessity for social protection. He considers at the same time that the scientific conception may be largely harmonised, so far as practical action goes, with the prevailing legal conception of responsibility. He emphasises the necessity for the individual treatment of criminals, and advocates the indeterminate sentence.

HAVELOCK ELLIS.

Der Körper des Kindes [*The Child's Body*]. By C. H. STRATZ. Stuttgart : Enke, 1904. Pp. 250, 8vo.

Das Seelenleben des Kindes [*The Child's Psychic Life*]. By KARL GROOS. Berlin : Reuther and Reichard. 1904. Pp. 229, 8vo.

These two volumes, which thus appear simultaneously, may be regarded as complementary. Dr. Stratz, who has already made a high position for himself by his gynæcological and anthropological books on

woman, has now turned his attention to the child, and has produced a book which is both delightful and instructive in a high degree. It is more especially dedicated to teachers, doctors, and artists; and, while competently scientific, it is not overburdened with technical details. The treatment is necessarily slight, as the author covers a large amount of ground in a small space, dealing with the influences of birth, with the questions of growth and proportion, with various inhibiting influences (scrofula, rickets, scoliosis, etc.), the progress of normal development according to age, with puberty and menstruation, and with the special characteristics of children among various human races. A charming feature of this, as of Dr. Stratz's other books, is the wealth of admirably selected and well-reproduced photographic illustrations; of these there are 189.

Professor Groos is chiefly known by his two books on play in animals and in man (both translated into English), which have thrown an immense amount of light on the psychological and æsthetic significance of the play impulse. In the present volume of selected lectures he deals broadly with the great subject of the psychology of childhood, now attracting so much attention. No attempt is made to bring forward new experimental investigations, as in Dr. Arthur MacDonald's book; or, as in Professor Chamberlain's book, *The Child*, to summarise the existing literature, with which, however, it is clear that the author is well acquainted. In his customary luminous and open-minded manner, Professor Groos broadly surveys the whole field, and discusses in detail certain portions of it. The first part of the book is devoted to the general survey, to the scope and the methods of this new science; the second part to the discussion of various special points, such as association, learning and forgetting, illusions of memory, recognition, logical processes, etc. While not a handbook of the subject, it is an admirable introduction to it.

HAVELOCK ELLIS.

Sex and Head-size [*Geschlecht und Kopfgrösse*]. VON Dr. P. J. MÖBIUS. Halle, 1903.

Dr. Möbius has been busy measuring heads, and gives the result in a pamphlet of fifty pages. He introduces to the German scientific world the conformateur, of which he gives an elaborate description, illustrated by two woodcuts. This instrument, familiar to hatters, was used by Crochley Clapham about thirty years ago for a paper in the *West Riding Asylum Reports*. Möbius gives accurate measurements of the heads of 360 men of more or less eminence. He finds that mental vigour is generally associated with large heads. His observations do not confirm the belief that there is a close relation between the size of the head and the stature. Möbius holds that the proportion of brain required for the bodily functions, muscular strength, heart-beat, glandular activity, is so small as scarcely to affect the calculation, so that the difference between the size of the brain in little and in big men remains an index of their mental activity. Small heads are rare with tall men, while large heads are very common with little men. He

admits that people with large heads sometimes show small mental capacity, which he is inclined to put down to unfavourable circumstances, or even to pathological conditions; but he denies that men have ever shown great mental power with small heads, though he admits that they may have isolated talent. Lombroso cites the Italian poet Foscolo as an example of an able man with a small head, but gives no measurements. Möbius tells us that the grave of Leibnitz was opened last year, when a skeleton was examined supposed to be his. The brain capacity was calculated by Krause at 1422 c.c., which would indicate a brain weight of 1257 grammes. According to Topinard, the average capacity of a European skull is 1500 c.c., the brain weight being 1400 grammes. If the skull was really that of Leibnitz, he must have had a small head and brain; but all the portraits of that philosopher represent him with a high forehead, and his friend Eckhard says that he was a man of little stature but had a large head. Möbius is careful to explain that he does not hold that a man with a head circumference of 60 centimetres must be cleverer than a man with 59. This is a pity, for it would save candidates for the army and civil services being tormented by examiners when a measuring tape would decide the question. I remember an old citizen of Edinburgh engaged in the hat trade during the first half of the nineteenth century who told me that the man who used the smallest hat was Lord Cockburn, a well-known judge and writer, whereas the biggest hats went to a baronet stated to be a very dull man.

At the end of the tables of head measurements of his 360 prominent men, Möbius gives a list of ten who had the largest and of ten who had the smallest heads. The first list comprises one chess player, two professors, one poet, and one actor. In the small-headed row are four princes, one count, two actors, and three dignified with the letter Von. Fifty ladies of Leipzig have magnanimously allowed the author of *The Physiological Weakness of Women* to measure their heads, only giving him a little trouble about their back hair. The results are stated in a table. Forty had heads measuring between 52 and 55 centimetres in circumference. Only two had heads 56 centimetres round. One of these ladies was the mother of a son who has written "some promising philosophical works." She busies herself in household affairs. The other large-headed lady is also engaged in housekeeping, which she discharges in a praiseworthy manner. Well, what more does Möbius want? Surely, on his own views, a woman who brings up a family well and manages a household deserves more credit than one who writes a novel or reads papers to learned societies.

WILLIAM W. IRELAND.

On Insanity in the Army during Peace [*Ueber Geistsstörungen in der Armee sur Friedenszeit*]. VON STABZARZT DR. GEORG ILBERG. Halle, 1903. Pp. 27.

Dr. Ilberg begins his pamphlet by stating that the percentage of insane is smaller in the German and Austrian than in the Italian,

English, and Belgian armies. Naturally, he observes, the mental soundness is greater in armies like that of Germany, where the best of the people regard military service as an honourable duty, and the sons of the most honoured families take the career of officers, than in those militias in which a crowd of shady and decayed beings seek a livelihood, as in the Dutch and English colonial troops and in the French foreign legion. Apparently Dr. Ilberg is not aware that the officers of the British army come from the highest classes in the country; but he must know that the Germans have no opportunity of showing their desire of gaining honour by enlisting, as they are compelled to serve for six years, two of which must be with the colours. In Germany, most young men look upon this period with undisguised aversion. It is only the sons of the poorest classes, accustomed to a hard and mean life, who find the dull routine and harsh discipline of the barracks tolerable. On the other hand, the British army is kept up by voluntary enlistment. Though pay is small, the military spirit of the country is so high that recruiting goes on best in times of war. During the South African War, 20,000 men left the home volunteer force for active service. Applicants for enlistment in the regular army have to pass a strict physical examination, and a large proportion are rejected for reasons which would scarcely keep them out of the German army, where pleas for exemption are not favoured. Apparently only one tenth of the young men on the roll for conscription are exempted from service as being morally and physically unfit, and this includes emigrants who escape altogether and the so-called volunteers (*Freiwillige*), about 8000, who go at their own charges in order to get off after one year's service. As for our colonial troops, we know not what corps Dr. Ilberg refers to; surely not the gallant men who came of their own accord to help the mother country from Canada, Australia, and New Zealand?

Some of Dr. Ilberg's remarks on the special causes of insanity in the German army are noteworthy. The first group which he considers are the feeble-minded; they are slow and awkward at drill, shoot wildly, fail to understand or keep the regulations, neglect to clean their arms, and are often callous and indolent. They are a perpetual drawback to the company and a plague to those over them. Ilberg's description of home-sickness is clearly the result of careful observation; he states that it has been known for hundreds of years, especially in the first months of recruiting time, and that many soldiers suffer from this affection. Most of them are men of poor mental fibre, whose parents or grandparents had suffered from mental derangements, especially depression. Yet sometimes young people of healthy families, and who have been quite healthy, are afflicted by home-sickness, especially when they are sent to distant garrisons. The strictness of the service, the summary character of military work, the change in their whole life, increase the sadness following separation from their friends, till their whole thoughts and feelings are concentrated upon the memory of home. Sometimes these feelings pass away; sometimes they fall into an acute melancholy. The worst cases sleep badly, eat little, think always of home, are very susceptible, lose all interest in the service, keep aloof from their comrades, and show a want of energy. They feel a pressure in the region of the heart; sometimes their distress passes away, sometimes it returns

periodically ; not infrequently they have hallucinations of sight and hearing. A considerable number of the suicides in the army (about one third, it has been calculated) are caused by excessive homesickness. It is a common cause of desertion. In some peoples, the disposition to home-sickness is very strong, especially the Swiss and the Tyrolese. Dr. Ilberg recommends kindly treatment, and that the officers should be considerate to those so affected. Apart from homesickness, young soldiers may be affected with weariness of life. This is especially the case with the Saxons, who become readily depressed and develop suicidal tendencies. Wuttke states that, while in the years 1893 to 1896, there were each year 209 suicides to the million in the whole German Empire, in the kingdom of Saxony there were 312 to the million. It has been calculated that from 1879 to 1884 in the civil male population there were 30 suicides to the 100,000, while amongst the common soldiers there were 75 every year to the 100,000. Dietz, writing in 1888, states the proportion for each year to be 25 civil to 66 military suicides. Ilberg calculates the number of suicides amongst the men of the German army and navy, excluding officers, to be about 400 to a strength of 519,317. Most of these acts of self-destruction occur in the first year of service, which is the most harassing. Suicide is relatively more frequent with the mounted troops ; this may be owing to the riding school. Fröhlich found that in the year 1882, while the proportion of non-commissioned officers to the privates was 1 to 6, the proportion of suicides was 1 to 27. The causes of suicide with the under officers are different from those of the common soldiers. He observes that from 25 to 30 *per cent.* of the suicides are caused by insanity, and there is no doubt that an equal proportion of the acts of self-destruction amongst soldiers are to be attributed to mental derangement not recognised. One would think that, being under close oversight, the onset of insanity would be more readily noted.

Dr. Ilberg observes that breaches of discipline and strange actions are often committed by epileptics. He points out that epileptics, as well as those predisposed to insanity by heredity, have a weak power of resistance to alcoholic liquors ; a quantity which would not affect a healthy man sometimes drives them frantic.

Dr. Ilberg is skilful in observing and classifying symptoms, and his description of dementia præcox is very graphic. The modern psychiatrists—in Sweden, in Switzerland, in Italy, in Russia, in America,—all agree that this is the commonest form of insanity. It is certainly so in Saxony, both in town and country. As this form as a rule appears about the twentieth year, it is frequently met with in the army, and most of the cases of insanity in soldiers fall under this head. Ilberg distinguishes the delusions of dementia præcox from those of paranoia. They are of a weaker character, less carefully constructed, and of a sillier cast. It is characteristic of dementia præcox that the patients have a propensity to repeat again and again the same words, sentences, or jokes ; that they mince their words, and that their gait has something unnatural and affected ;—for example, they will walk round and round, or back and forward, for hours ; they are apt to do the contrary of what is regarded as useful or customary. They will refuse

their food and then eat greedily, or at their meals practise all kinds of antics. Such patients sometimes fall into long-continued stupor or trance; most cases of this form of insanity are incurable, although the patient may live for many years.

Dr. Ilberg tells us that general paralysis is the commonest form of insanity with professional soldiers between thirty and fifty years of age in all European armies. It is especially liable to follow syphilis which has been imperfectly treated. A man who has had the misfortune to be infected and lives quietly and at his ease is much more likely to escape general paralysis than one who has to go through mental work and strain. Daricarrere has observed that in the French army those officers who have been promoted from the ranks are the most liable to become paralytic.

Dr. Ilberg has observed instances of "moral insanity" or "moral idiocy" in soldiers "in whom all the higher ethical sentiments are wanting—the fear of God, patriotism, gratitude, truth, compassion. The patient is ruled by an impulse to act against morality." He observes that this want of the moral sense is combined with a greater or less intellectual weakness; such subjects soon get into trouble when serving as soldiers—they over-stay their leave, commit dishonorable actions, cheat and steal, and are always incurring fresh punishments. Here it may be remarked that the moral code is in many respects different from the articles of war; a man may be very immoral and still pass as a good soldier. Indeed, in war time a soldier has little to do with moral feelings; he is employed to kill and destroy according to the orders of those above him, and the restraints of discipline are much more rapid and certain than the ordinary motives of morality. We should say a soldier who transgresses the articles of war must have a very serious intellectual defect, if he has any regard for his own happiness. In conclusion, the author points out that many of the deeds which lead the young soldier into severe punishment are really symptoms of commencing insanity. It is very important that this should be at once recognised, and this can only be done by the military surgeon, who should be well instructed in psychiatry. Soldiers subject to mental instability impair the efficiency of the army. Their cases should be considered in time of peace; during war they are likely to meet with very rough treatment.

WILLIAM W. IRELAND.

Part III.—Epitome of Current Literature.

I. Anthropology.

The Execution and Post-mortem Examinations of the Three Van Wormer Brothers. (*Daily Medical Journal*, Feb. 8th, 1904.) Spitzka, E. A.

THE simultaneous examination of the brains of three brothers must be a unique event, and this investigation, which was conducted by Dr.

Spitzka in conjunction with Drs. Ransom and Carlos MacDonald (and only a brief preliminary report of which is here given), has therefore an interest beyond its criminological significance. The three brothers murdered their uncle, and were executed by electricity in New York last year. They entered the death-chamber without any fear or trembling, "making less fuss than many people do before the photographer's camera," and the successive executions of the three men and all the necessary arrangements were completed in a quarter of an hour, consciousness being in all cases abolished instantaneously. The chief physiological effects of the electric current noted were the high *post-mortem* temperature, the fluid condition of the blood, the tetanised state of the ventricular portion of heart, the almost bloodless condition of the lungs, and the contraction of the colon.

The ages of the brothers ranged between twenty-one and twenty-seven, and they were of good average height. The motives and circumstances of the crime are not stated, but it is mentioned that none of the brothers were known to have shown mental defect or disease. No cerebral lesions were found, and so far as the investigation goes at present, there were no grave cerebral defects or malformations. The form of the brain, as also that of the head, was similar in all three brothers. The relative proportions and the gyral physiognomy were also similar. The cephalic index during life ranged within a few units (79 to 83). It is noted that in all three brains the right lobe is narrower and less bulging. In the younger brother's brain there was a well-marked post-orbital limbus on the left side, not produced *post mortem*. In body-weight and in brain-weight there was a progressive increase from the eldest to the youngest brother, the brain of the eldest weighing 1340 grms. and that of the youngest as much as 1600; the youngest had also the largest skull and the most brachycephalic. Dr. Spitzka suggests that there had "occurred a sort of brain shrinkage, from non-use of the intellectual faculties, most marked in the eldest." No evidence is, however, brought forward on this point, and the suggestion scarcely seems altogether to commend itself. It might safely be said that there was anything but shrinkage in the case of the younger brother's brain. It may be pointed out that it is a well-ascertained fact that a woman's children are on the average successively heavier at each birth, such differences especially affecting the head. There is no evidence to show that this initial difference tends to be maintained throughout life, but it may well do so in some cases, and this possibility would render unnecessary the adoption of any more hazardous supposition.

HAVELOCK ELLIS.

A Study of the Brain-weights of Men Notable in the Professions, Arts, and Sciences. (Philadelphia Med. Journ., May 2nd, 1903.)
Spitzka, E. A.

Dr. E. Anthony Spitzka, who during the last few years has succeeded in obtaining for study the brains of various men of eminent ability, has here brought together the recorded brain-weights of notable men, and tabulated them from various points of view. The author has displayed his characteristic energy in exploring the literature of the subject,

and has certainly succeeded in compiling a larger number of brain-weights of eminent men than any previous inquirer, although he has eliminated all those that seem to be of dubious authenticity. His list extends to 96 brains, of which the largest is Tourgueneff, at 2012 grms. (a weight ascertained by very competent authorities), and the smallest Gall's, at 1198 grms. (Of Gall it must, however, be said that he had a very capacious skull, and it is estimated that the brain in maturity weighed some 300 grms. more.)

The average (arithmetical) brain-weight of the ninety-six individuals is 1473 grms., and although the average age is about sixty-three years, the weight exceeds the general average for European brains by from 75 to 125 grms. It must, however, be pointed out (since this is not done by Dr. Spitzka) that the ordinary European averages of brain-weight are founded on the working classes, and generally not on the most successful members even of those classes. It is therefore by no means surprising that the "notable" men should exceed the general average in brain-weight. The only sound comparison would be with the professional class, out of which the "notable" men have risen. It is, however, interesting to observe that the period for the decrease of brain-weight with age, is delayed in the notable men for ten years as compared with the general population. Dr. Spitzka has also calculated the average brain-weight of the notable men according to nationality, and finds that the United States and Canada stand first, followed by the British Islands. Another classification in accordance with the nature of the intellectual activity of the subjects shows that the group of followers of the exact sciences have the highest average brain-weight, the men of action (government, politics, military, etc.) coming next, followed by the group of artists, philosophers, etc., while the group of men devoted to the natural sciences come last, still possessing, however, an average brain-weight of 1444 grms.

HAVELOCK ELLIS.

A Study of the Brain of the late Major J. W. Powell. (Amer. Anthropologist, Oct.—Dec. 1903.) Spitzka, E. A.

In the introductory part of this valuable study Dr. Spitzka summarises and revises his earlier study of the brain-weights of eminent men, bringing the number of acceptable cases up to 103. He then proceeds to bring forward a few general considerations suggested by his own experience (which is now considerable) in the study of the brains of eminent men. It is of interest to note his opinion that "the external appearances of the cerebrum often give the best indication of the individual's psychic powers. In other words, experience teaches us that there is a physiognomy of brain which portrays intellectuality quite as often as does the outward physiognomy." He has also found reason to believe that intellectual power (and speech in particular) is frequently associated with high development and differentiation of the left insula.

Major Powell was a man who "came from the plough," and by native ability attained a certain degree of eminence as soldier, explorer, geologist, and anthropologist. It can scarcely be said that he attained very high intellectual distinction in any of these fields, but he was a man of great mental energy, power of organisation, and, more especially, force

of character. He was somewhat small and short of body, and died at the age of sixty-eight. His brain, however, on being removed from the body, weighed, with the pia-arachnoid, 1488 grms. (or 52.5 ozs.), decidedly above the average. The chief characteristics of the brain are summarised by Dr. Spitzka as consisting in a superior degree of fissural complexity and flexuosity of gyres, greater differentiation of left sub-frontal gyre as compared to right, slightly superior differentiation of left insula, great redundancy of subparietal regions, preponderance of right frontal lobe over left, precentral gyres more massive than post-central, pineal body unusually large.

Dr. Spitzka makes an interesting attempt to correlate the special features of the brain with the special mental characteristics revealed by Major Powell during life, and is inclined to connect the great development of the parieto-occipito-temporal area with Powell's marked powers of observation and broad generalisation.

HAVELOCK ELLIS.

2. Clinical Neurology and Psychiatry.

The Case of John Kinsel. (Psych. Review, Sept. and Nov., 1903.)
Cutten, G. B.

This is the detailed history of a case of "double personality" very thoroughly known to Dr. Cutten. "John Kinsel" is the only child of a New England farm- and land-owner. The heredity is unsound: on each side of the family there are insanity, alcoholism, and other tendencies to nervous degeneration. The subject himself has been nervous from early childhood. From the age of four to twelve he stuttered, and is still liable to do so when in the company of those who stammer. His eyesight has always been bad, and he suffers from headaches. At an early age he became somnambulistic. It was when he was at college (studying for the ministry) that his somnambulistic state definitely developed, at first with eyes closed, and later with eyes open, walking about and carrying on the ordinary duties of life. On one occasion, when out for a sail with fellow-students they were becalmed and had to spend the night in the boat. In the morning John fell into his somnambulistic sleep and began to compose doggerel rhymes about the trip as fast as he could talk. After this, in his "sleeping" state he seemed to be much wittier, brighter, and more intellectual than in his normal state, though at the same time his conversation was less refined and his disposition more surly. He was also liable to get drunk, which was not the case during his normal state. There was an extraordinary exaltation of memory during the sleeping state; thus, after a glance at the book, he could turn away and repeat six lines of Greek, a feat quite impossible to him in the normal state, and not easy for anyone. During his junior year at college, epileptic attacks developed; the seizures were slight, but he sometimes fell and became unconscious. It was not until the senior year that the final stage of somnambulism, that of vigilambulism with open eyes, developed.

In the secondary state of this fully-developed "double personality," he remembered all his past life, but when he returned to the primary

state he could not remember anything that had occurred in the secondary state. He frequently remembered the details of the primary state even better when he was in the secondary state than when he was in the primary state. At first his appearance, voice, etc., were different in the two states; finally they became identical, so that he himself could sometimes only with difficulty tell in which state he was. The final test was memory. Much inconvenience was caused by the lack of memory of events occurring in the abnormal state. Thus lessons prepared during the sleeping state were not remembered if the time for recitation occurred in the waking state; during the last part of his senior year fully half his time was spent in the "sleeping" state. He successfully passed an examination in biblical literature when "asleep." He became engaged, keeping the young lady in ignorance as to his condition. Many difficulties then arose. When at last he appeared before his *fiancée* in the abnormal state and drunk, she broke off the engagement. Finally, on medical advice, he left the divinity school and returned home, dividing his time between farm-work and elementary school-teaching. This has proved very beneficial, and the abnormal states have gradually disappeared. He is free from epilepsy, and is said to be a successful teacher.

These states possessed other features of interest beyond those already mentioned. Thus powers very like clairvoyance were sometimes displayed. He was once able to say exactly what his *fiancée* was doing at a distance; and when he was lying down in a room in which a game of chess was proceeding, he was able to state the exact position of the pieces on the board, although it was impossible for him to see them. He was occasionally subjected to hypnotism. The hypnotic state was not identical with the "sleeping" state; it was a third state, in which he could remember the events of both the other states. None of the hypnotic or other devices were permanently successful in arousing him from the "sleeping" state; they succeeded at first, but soon lost their efficacy.

Cutten regards the abnormal state as the equivalent of epileptic seizures. While epilepsy was the predisposing cause, the exciting cause was complex, being partly the strain of study under unfavourable conditions and partly eye-strain. It is suggested that there was probably a kind of auto-hypnosis. Cutten believes that so-called "double personality" is merely the extreme degree of a condition which, in its slight form, occurs normally. In this slight form it is a mere temporary lapse of memory, as when we pass the post-office forgetful of the letter we have to post; but the transition to complete "double personality" may be traced without a break. Taken literally, that term has no real meaning.

HAVELOCK ELLIS.

Reversals of Habitual Motions, Backward Pronunciation of Words, Lip Whispering of the Insane, Sudden Failures of Volition, Repetition Impulses. (Journ. of Nerv. and Ment. Dis., April, 1903.) Mitchell, S. Weir.

This paper contains brief records of several forms of mental disorder. The first case described presented a very uncommon symptom of a

diseased brain, the phenomena being called by the author, for want of a better term, "reversals." These assumed two forms, the opposite of the thing willed being done, or else what it was meant to do was done in a way which reversed the usual manner of doing it. For instance, the patient, a capable naval officer of middle age, when on the landing of a staircase, intending to go up the next flight of stairs, instead of doing so found himself going down the flight he had just ascended, and going down backwards. After a while, he found that he had great difficulty in ascending and descending stairs in the usual way, and when alone was apt to go up and down stairs backwards. He would go to a door to unlock it and find himself making an effort to lock it. During the years of this peculiarity he served in the war of the rebellion with distinction. Another case was that of a middle-aged lady, who, after indulging in the habit of looking at the end of a book before she began to read it, found it impossible, after a time, to read a book in the usual manner. Persistent effort to do so led to flushes and slight mental confusion. A woman of fifty, who suffered from attacks of mental disorder caused by uræmic conditions, would for hours have a tendency to reverse actions, putting on her drawers over her head, her chemise over her lower extremities, shoes on her hands, and gloves on her feet. These curious reversals of habitual acts occurred only during the period when she was not in normal relation with the world, and of them she had no remembrance afterwards. Another patient, a distinguished officer, worn out in service, also had like reversals in regard to his underclothes, shoes, gloves, etc., and in addition he would try to get into his bath head first instead of stepping into it. A dentist, seen by the author some years ago, was subject to periodic headaches of great intensity lasting a day or two, and followed by distinct paresis of the right hand and a disturbance of language, the patient using words the meaning of which was the reverse of what he meant. He eventually quite recovered. An unique case in Dr. Weir Mitchell's experience was that of an accomplished and scholarly gentleman suffering from a cancer of the left anterior lobe of the brain, who said backwards what he wanted,—for instance, "tac-im," when he meant "my cat." The author next refers to lip whispering, which he believes to be a common symptom in people who for years remain on the borderland of insanity, sometimes near it, at other times across it. Referring to obsessions—or despotic habits, as he prefers to call them—he points out that many of us yield at times to some minor and harmless one, such as treading on alternate stones in walking, but advises one to watch all such valueless habits, since they may in the end become masterful. The obsessions of childhood appear so far to have escaped study, he says, and recalls how one of his brothers in childhood had a horror of fluffy objects, while another would not go out of doors without an umbrella. A rare form of mental difficulty consists in a suddenly acquired incapacity to do, not a certain class of things, but one particular thing. A lady at times found herself unable to answer some simple letter, while a male relative could not pack his valise. The last case he mentions is that of a married lady who for twenty-four years had strong impulses at times to kill her children and herself. Her obsessions then changed absolutely, and she developed the despotic need when doing minor acts to

repeat them with unchanging numerical relation to the person she happened to think of at the time. Thus she would lift a book, and would have to do it three times for a cousin, six times for her husband, nine for someone else. In all the author records fourteen different repetition and other impulses in this case. During this time her mind was clear, and she was an efficient mother, wife, and housekeeper, and a great reader. She was twice under medical care, but entirely recovered, and now is without trace of her former peculiarities.

A. W. WILCOX.

On the Pathological Origin of Doubt in Mental Weakness [Sulla patogenesi del dubbio nelle psicastenie]. (Riv. di patol. nerv. e ment., Aug., 1903.) Majano, N.

This contains a long description of a case of the insanity of doubt with a subtle analysis of the symptoms. The patient, M. D—, was a native of Rome, æt. 36 years. From childhood his ways had been hesitating and doubtful; for example, on putting things by, or locking up money in a drawer, he would return several times to make sure that he had actually done so. In 1898, he had an attack of influenza, which caused great mental depression and confusion of thought. He was employed as a clerk in a carriage factory, but, being unjustly reprovved by the manager, he abruptly left his post. For some days he was in a state of melancholy, with feelings of distress in the head. His mind was kept busy by perpetual doubts about the reality of things, and he had ideas of suicide, so after being treated by many physicans it was deemed necessary to send him to the public asylum at Rome, to which he was admitted on April 20th, 1902.

M. D—'s mother was hysterical. He himself seemed to have a good constitution, and was of temperate habits. There was some asymmetry in the muscles of the face. He appeared to be in a restless state; there was a want of inhibition in his movements, with rapid flushings of the face and eyes, showing vaso-motor disturbance. His whole attention was occupied by his subjective sensations and emotions, and by a crowd of questions which obtruded themselves. He had a feeling of internal formication, cutaneous paræsthesia, swimming in the head, sinking through the ground, a sense of weight in the limbs and of general tightness. These sensations were most felt when the barometer was low. There was a powerful sentiment that everything which he witnessed was strange and new, as if he saw it for the first time. He was continually brooding over idle questions regarding the origin and reality of things. He was ready to talk about his feelings, and noted especially that everything he saw seemed pale and faint. He was unable to retain the representation of the visual images which he had just seen.

It is to be borne in mind that people have different powers of realisation of the impressions of their senses. Some spontaneously note the visible appearance of an object or of a person; others the character and tone of his voice. With M. D— the visual impressions were feeble, and when he shut his eyes he was unable to recall the appearance or situation of an object. When in good health, especially in fine cold weather, he was cheerful, and had the sense of fulness and reality. When

depressed everything seemed faint, void, and strange. For example, looking at himself in the mirror it seemed as if he saw himself for the first time. His mother, his brothers, his sisters, all appeared new; he smelt a flower, the perfume was new to him; he saw the doctor, the doctor was strange to him, but not his voice. The cat appeared new to him, but not the feeling of stroking its fur. In general he failed to recognise or to figure to himself the representations of what he had seen and heard, and his mind was perpetually occupied with what he had done and whether he had done it. The realisation of tactile sensations and muscular motion was better preserved than those of sight and hearing. The treatment pursued by Dr. Bonfigli and Dr. Majano was as follows:—A warm bath in the morning, hypodermic injections of iron and arseniate of soda and hypophosphites, afterwards injections of phosphorated oil (about a milligramme and a half of phosphorus each day). He was put to work in the garden and subjected to a methodical mental training, with the object of overcoming through exercise his special deficiencies. Under these influences he slowly improved. After eleven months in the asylum he was more cheerful, and the sense of doubt and emptiness had much diminished and the sense of images was better realised.

Dr. Majano mentions another case of the same character which he has previously described. A carabineer, twenty-two years old, after an accident in the railway fell into a low state of health, in which there was a deficient realisation of visual and auditory images. At the same time he was in a state of perpetual doubt about all his recollections. He had a sense of emptiness in the head, and was beset by fixed ideas, such as the desire to throw himself out of the window, and he showed in all his doings a distressing want of resolution. This condition lasted for months.

Dr. Majano has added to the description of his cases over twenty pages of notes and comments from the literature of obsessions, hallucinations and disorders of memory, which, though desultory, are often interesting. He considered the sentiment of doubt, called by the Germans *grübel sucht*, is founded upon diseased emotions resulting from a hypertrophy of the visceral and nervous apparatus on which the emotions of fear are dependent, while at the same time the superior intellectual centres are weak. These morbid doubts and fears are not wholly dependent upon disorders of memory, because there are often fears for the future. The memory, however, is often affected, and, as Dr. William James has remarked, there are various kinds of memory—a visual memory, an auditory memory, and a motor memory,—as well as a variety of powers of imagination in realising these impressions. Majano holds that these different sensory impressions have their seat in different parts of the brain, and that the sentiment of unreality, of strangeness, of doubt, and the desire of questioning are dependent upon a functional insufficiency of particular areas of the brain set apart for intellectual operations. In reference to hallucinations, Sergi has maintained that an impression may take a double course—first centripetal, then centrifugal. The first excitation comes from the periphery, whence it goes to the brain.

Fixing the gaze on a colour with one eye, while keeping the other

L.

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shut, then looking at a white sheet, the image appears not only in the open eye but also in the other, which has received no impression; only the image in the first is negative, and in the second it is positive and pale. Sergi thus explains the experiment. The left eye ought to have a negative image from the exhaustion of the retina, exposed for a long time to the impressions from the coloured ribbon; the right eye, which remained in repose, received a centrifugal excitation, and because the original excitation came from the left eye the right ought to have a positive image, not having been exposed to exhaustion.

Majano repeated this experiment through the tube of a stethoscope. He found that the eye which was kept closed retains a negative image of the colour seen by the open eye; for example, looking long and fixedly with the left eye at a piece of red worsted, he saw projected upon a white sheet a spectrum of pale green, then looking with the right eye he saw a clear green. Looking with the left eye at the red wool he had complementary green image and a spectrum of red in the other eye.

It is not agreed amongst physiologists whether the image seen in the shut eye comes really from the retina or from the visual centres of the brain. It had been supposed that the excitation of the active retina passes to the retina in repose by the anterior commissural fibres of the chiasma, which according to some anatomists establish a direct connection between the two retinas; but this connection, which used to appear in old diagrams, has been denied by recent anatomists. But it is well known that both sides of the brain receive fibres from each optic nerve. On the supposition held by some physiologists that the image goes backwards to the retina into the visual areas in the cerebrum, whence it returns to excite the retina of the other eye, if Sergi's experiment were made upon a man blind of one eye from cataract, or pupil otherwise occluded, should the spectrum not appear in both retinas? or if the image simply came from the visual areas in the brain, should the image not appear as double even with a man blind of one eye?

WILLIAM W. IRELAND.

On the Blind Deaf Mute Agnes Halonen [Om blinda dofstumma Agneter Halonen]. (Nyt Tidsskrift for Abnormvæsenet omfattende Aandssvage, Blinde- og Vanfore-Sagen i Norden, Heft 7, 1903.[1])

Aug. Helin, of Stockholm, gives an account of this interesting case. Condillac, when he considered with subtle analysis the situation of persons deprived of the use of each of the senses, would have gladly availed himself of the cases of Laura Bridgman, Oliver Caswell, Meystre, Ragnhild Kaata, Hellen Keller, and other triumphs of the educational art. There is now, in the Asylum for the Blind at Edinburgh, a boy both blind and deaf, who has been rescued from mental darkness by the painstaking exertions of Mr. H. Illingsworth, the head master. To these instances of successful teaching, we may now add that of Agnes Halonen. This girl was born in Finland in 1886. When eighteen months old, she lost her sight from scarlet fever, and a year afterwards she became quite deaf. This is stated to have been a sequel of inflammation in the throat. Not being able to hear her own voice, she soon ceased to speak. The latent intelligence could only exert itself through

a few simple signs, such as putting her hand in her mouth when she wanted food, patting people on the cheek for "no." She used to follow her mother about, and could recognise members of the family by touch. We are told that she looked back on those days with regret. When about eight years of age, Agnes was sent to the School for the Blind at Helsingfors. At first she was home-sick, and did not like being bothered with lessons. She used to run about and kick her teacher. But she soon showed a capacity for receiving instruction. She was taught to sew and knit. The first word she recognised as a symbol was "door." The teacher showed her the door and then the word in raised letters, and she grasped the significance. After some weeks she understood questions.

She was taught the finger alphabet used for the deaf. This her friends learned in order to be able to converse with her. She learned the Braille type very quickly, but was slow at learning to write it. After a year she could only write ten words. It was four years before she could write sentences. Now she can express in writing her wants and feelings. She is seventeen years of age, and has been nine years at school. She can read books in the Braille and Moon's characters. She has also learned punctuation. She has been taught geography on raised maps, and knows the capitals of countries in Europe and Asia, the mountains and rivers and other features, the forms and ways of plants and animals, and the history of Finland. She has gone through Luther's catechism and the psalms. She found much difficulty in learning counting, especially mental arithmetic. To teach her drill, they had to grasp her and guide her motions. She is now in the higher classes of gymnastics. She has learned to sew, spin, crotchet, plait and make brushes. These she learned as quickly as girls who could see. Her work has been exhibited at Carlsruhe, Kiel, and Berlin, and has been everywhere admired. She likes to work in the kitchen, and wants to know how everything is made. She has learned the Swedish language in addition to her own Finnish. Her other senses, carefully exercised, are very acute. She can recognise some people by their tread, and even knows when persons are talking loud by the vibration produced. She moves about freely in the school, and through the long passages counting her steps, she finds her room. It made her very sad when she was made aware of the deprivation she suffered, but when she knows that people are in distress she tries to console them. She was much affected at the death of one of her teachers, and became more inclined to entertain feelings of religion, to which formerly she had been somewhat indifferent.

In Finland, there had been no teaching of the deaf to speak by the oral method, but her teacher, Emily Strunck, managed to get Agnes to follow spoken words by putting her fingers on the lips and throat. After this she was taught to utter a few words. After three years at the school she returned to her home, when she went at once to the place where her bed was. Her mother was much moved when on the last visit Agnes could utter her father's and mother's names.

WILLIAM W. IRELAND.

(¹) A serial treating of imbeciles and defective persons, edited by Prof. Christian Keller, of Copenhagen.

Complex Synæsthesia in an Epileptic [*Phénomènes de Synesthésies chez un épileptique*]. (Rev. Phil., Aug., 1903.) Ulrich, A.

The phenomena of synæsthesia, of which colour-hearing is the most frequent, are now recognised as common; the interest of the case here presented by Dr. Ulrich, of the Asylum for Epileptics at Zürich, lies in its complexity. The subject is twenty-four years of age, of neuropathic heredity, a healthy child who became epileptic in his third year after measles. The disease gradually increased in severity, and there has been a progressive decline of the intellectual faculties, especially memory. As a child, however, he was a clever calculator (his maternal grandfather was a distinguished mathematician), and he was well educated at home. He is very impressionable and excitable. He has a very keen sense of colour, and can describe the most subtle differences. From his earliest years voices have had colours to him, and he can hear nothing without a definite colour impression. The colours are very delicate, and transparent, like the colours of the prism; he does not actually see them before his eyes, but seems to hear them at the same time as he sees them. The vowel sounds have the most intense colours, which are here fully described, as well as the colours of musical instruments, cries of animals, etc. Colour-hearing is, however, by no means the only form of synæsthesia presented by this subject. All the senses are affected. There is optical synæsthesia, whereby geometrical forms, etc., are coloured, and whereby also colours have faintly marked tastes. There is, again, olfactory synæsthesia, by which odours produce colours; gustatory synæsthesia, by which tastes produce colours; and similarly tactile synæsthesia, and synæsthesia produced by painful impressions. There is finally a reciprocity of synæsthesia, by which colours recall the sensations with which they are associated. Among the points to be noted are that pains produce sensations of taste and also of temperature, while heat sensations produce sensations of vision and also of taste, and olfactory stimuli produce both visual and taste sensations. Ulrich has no doubts about the reality of the phenomena; he has observed the subject frequently during the past three years, and has always found the manifestations constant (except for some trifling variations in the smell and taste sensations, which are those of least intensity), notwithstanding the subject's weak memory. A brother and also to a slight extent the father have colour-hearing to a less degree, but their manifestations are different. The phenomena are most vivid after a quick succession of fits, and at such times it occasionally happens that there is some slight mental disturbance, and the patient fancies he is bewitched by the colours. Ulrich believes that all the synæsthesias so far known are combined in the person of his subject. HAVELOCK ELLIS.

On an Unusual Alteration of Memory in an Insane Alcoholic and Wife-murderer [*Su di una singolare alterazione mnemonica in un alcoolista alienato uxoricida*]. (Riv. sper. di Freniatr., vol. xxix, p. 588.) Cristiani, A.

This highly interesting study deals with an alcoholic pedlar, æt. 33, married, and the father of children, a sufferer from insane heredity,

bilateral, intense, and extended. In his own person he exhibited no mental peculiarity until he gave himself up to drink, whereon followed alcoholic insanity, with hallucinations and delusions of persecution and conjugal infidelity, culminating in the murder of his wife. N. R.—went into a tavern in Lucca with his wife and children on the evening of November 29th. He was not drunk, he had not an epileptic fit, he was tranquil, there was not any quarrel. While they sat listening to the music and watching the performance of acrobats, he drew a knife from his pocket and stabbed his wife to the heart, so that she died on the spot. To those about him demanding explanation while disarming him, to the police who arrested him, to the magistrate who took the first depositions in the case, to the prison doctor who examined him when he was sent to prison on remand, to the other prison officials, and to his fellow-prisoners, he told quite uniformly the same story. “Two Pisans were singing a song in the tavern. They mentioned Musolino, but it referred to me. Then a woman came on the stage with a large iron ball and lifted it with her hair, and turned round towards me. I said to my wife, ‘You see that I am to die this evening.’ She answered me, ‘No! it is nothing,’ and I tried to persuade her that I was right and that I would have done well to go away. I understood that she was in league with them, and that she made a signal to them. Then I rose, and, drawing a knife from my pocket, struck her a blow and killed her.” He showed no remorse, saying that if it were to do again he would do it unless he were himself to die, and also that his death or his wife’s was inevitable that evening. He repeated all these statements in the most categorical manner in a letter to his uncle which he dictated from prison on December 6th (seven days after the crime). While he remained in prison, however, his delusions seemed to become less vivid, and he was noted as improved. When Dr. Cristiani visited him as an expert, in presence of the medical attendant of the prison, Dr. Del Carlo, on February 11th, they found that the prisoner had forgotten everything that had occurred from the time when he went into the tavern to supper with his wife and children till about the middle of December (that is, about a fortnight after the murder). He did not remember his letter to his uncle, nor did the reading to him of the depositions or of his own statement to Dr. Del Carlo in any way refresh his memory or recall the circumstances. All the time he retained his general delusions about his wife, though these were not now, as formerly, reinforced by hallucinations. He said that he had often before planned to put an end to his persecutions, either by killing his wife and her comrades or by suicide. He said (truly, it would appear) that he had twice attempted suicide. This state of things lasted till about March 20th, when he became intensely agitated and actively deluded, with numerous hallucinations, terrifying persecutory ideas, and ideas of conjugal infidelity, with aggressive and suicidal impulses. With the appearance of this outburst returned spontaneous and complete memory of all the incidents of his crime, including the real occurrences of the song of the two Pisan musicians and the performance of the woman with the iron ball, together with his delusional interpretation of the significance of these incidents. He remembered also his statement to the prison doctor and others, and his letter to his uncle. He was conscious that for a time he

had forgotten these things, but could give no explanation. He said: "Now I remember everything very well; then I recollected nothing." Red tape is not parasitic only on the British army, and so it is recorded that while the authorities wasted time in official fiddle-faddle preparatory to sending this interesting person to an asylum, he broke a window in the prison on April 5th, and, taking a bit of glass in each hand, cut his throat on both sides nearly to the vertebræ, severing all the large vessels and dying at once.

Cristiani rightly dismisses feigning, hysteria, epilepsy, and double consciousness, and concludes that we have merely to deal with a "lacuna mnemonica," which, however, became subsequently perfectly filled up. He refers to a similar though not identical case, recorded by Bonhoeffer, in which a drunkard while suffering from pathological intoxication set fire to his stable. He then fell into a heavy sleep. On awaking he remembered nothing of his offence, nor the circumstances which led up to it. Two days later he developed delirium tremens in prison, and then recalled all the circumstances of the arson. On recovery he retained the memory of these events. It is to be observed that Cristiani attributes the relapse of his patient to the fact that owing to his means running out he could not obtain during the latter portion of his stay in prison the wine, etc., which had been supplied to him at first. Cristiani seems to account for loss of memory in his case and return of memory by respective conditions of diminution and excess of the functional activity of the brain.

CONOLLY NORMAN.

Study on Mania [Étude sur la manie]. (Arch. de Neurol., May, 1903, No. 89.) Soukhanoff and Kine (Moscow).'

This study is based on cases seen at the Moscow Clinique of Psychiatry. Cases with melancholia before or after the attack, cases in which mania appeared as a complication of general paralysis, dementia præcox, senile dementia, etc., were excluded; but cases presenting more than one attack of simple mania were included. In the last fifteen years 4434 patients (2840 men, 1594 women) were treated at the clinique, but only forty were cases of mania, sixteen men and twenty-four women; so that the observers consider that mania is a rare disease. It is apparently more common in women than men, which is generally believed. Melancholia is a much more common disease, and is also more frequent in women. By far the commonest age for the onset of mania is from sixteen to twenty-five years. Reviewing the German literature on the subject, the authors note that their statistics of mania are decidedly low, even when compared with those of Mendel and Ziehen, who consider that mania is a very rare psychosis. One must note, however, that Soukhanoff and Garmouch Kine exclude many cases which others include under the heading of mania (*e.g.*, Tobsucht and Wahnsinn); moreover their clinique is an out-patient clinique, and therefore includes a certain number of mental cases which do not require hospital or asylum treatment. Concerning the question of predisposition, they note an hereditary taint in 87.5 per cent. of their cases of mania.

H. J. MACEVOY.

Obsession and Delusion [Obsession and Délire]. (Arch. de Neurol., 1903, No. 93.) Marandon de Montyel.

One of the most interesting points to elucidate in the study of obsession is to determine whether, as is held by Magnan, an obsession never develops into nor culminates in a delusion. Séglas has published observations to the contrary, and Dr. Marandon de Montyel supports Séglas. The notes of two cases are published. In the first there is simply a coincidence: a young lady suffering from obsessions of fear (dread in the presence of fire-arms, dread of dogs, of fish, etc.) developed acute mania on the morning of the day fixed for her wedding; but in the second the delusional insanity manifested itself as a direct emanation, or a progressive transformation of the obsession. A barrister, aged thirty-four years, with strong views against the corporal punishment of children, was frequently beset with the idea of striking his boy, of whom he was inordinately fond; the impulsion was at times so strong as to make his life a burden. As a result of influenza the child developed otitis, and his sufferings caused the father to imagine that he had, as a consequence of his obsession, struck his son on the ear and caused the mischief. He had as a matter of fact never raised his hand against him. The child developed cerebral complications; an operation was performed, which proved fatal. The father became completely insane; he accused himself of having killed his child, became suicidal; auditory hallucinations were present. After seven months' asylum treatment he recovered.

H. J. MACEVOY.

Contribution to the Study of the Individual Manifestations of Besetting Fears in the Ideo-obsessive State [Contribution à l'étude des manifestations individuelles des peurs obsédantes dans la constitution ideo-obsessive]. (Arch. de Neurol., 1903, No. 93.) Soukhanoff.

Obsessions are rarely single, although some of those present may exert but little influence on the patient's conduct. The object of the author is to draw attention to certain associated symptoms in cases of obsession. He refers especially to cases of obsessions of jealousy, of pathological fear of catching cold, of fear of clocks, etc., in which, in addition to the leading or prominent besetting idea, there are other individual peculiarities which may or may not manifest themselves in the conduct of the person, but which experience shows are characteristic of what the author calls the ideo-obsessive constitution.

H. J. MACEVOY.

New Observations on the Neurosis of Anxiety [Nouvelles observations de névrose d'anxiété]. (Arch. de Neurol., 1903, No. 89.) Harttarberg.

Cases of anxious neurosis prior to the work of Sigmund Freud, of Vienna, in 1895, were generally included under the heading of neurasthenia—neurasthenia thus constituting a comprehensive class in which were ranged most of the ill-defined nervous disorders which did not conform to the classical definition of hysteria and epilepsy. The salient symptoms of the neurosis of anxiety are—(a) general irritability, especially to auditory impressions; (b) an habitual state of anxious ex-

pectation ; (c) crises of acute anxiety in which the habitual anxiety is exaggerated, and accompanied with organic disorders (palpitation, dyspnoea, cold sweats, gastric cramp, etc.) ; these crises may be rudimentary only (cardiac, respiratory, gastric—simply) ; (d) equivalents of crises—paræsthesias, nocturnal terrors, tremblings, etc. ; (e) phobias and obsessions. These symptoms may vary or be combined in various degrees, but the salient, the essential sign is chronic anxiety with acute paroxysms. The fact that the neurosis of anxiety may be associated with neurasthenia has no doubt prevented the recognition of the former as a definite entity, and in this connection the notes of an interesting case are given by the author, in which the neurasthenia was cured under suitable treatment, while the neurosis of anxiety persisted for a long time. According to Freud, anxious neurosis is due to insufficiency of sexual gratification, and there is much truth in this statement, which receives support from some observations of Galtel, Kisch, Janet, etc. The notes of the case of Madame M—, given by Hartarberg, favour this conception of the etiology of the disease. But the sexual factor is not the only one. The author believes that any shock, any emotional trouble, may determine the neurosis. In one case under his care, the notes of which are given (Case iii, M. F—, æt. 36 years), the emotions of automobilism proved to be the exciting cause. In all these cases, we note especially disorder of the emotions, so that the author thinks that the seat of the disease is in the sympathetic system, the functions of which, being altered by such ordinary causes as fatigue, exhaustion, overwork, intoxication, etc., evince pathological superexcitability ; and he hazards the view that anxious neurosis may consist in an irritable enfeeblement of the sympathetic system, just as neurasthenia is considered to be an irritable enfeeblement of the cerebro-spinal system. This would also account for the frequent association of the two conditions. Many authors, Pitres, Régis, Ballet, Lalanne, while recognising anxious neurosis as a clinical reality, refuse to look upon it as a distinct neurosis, considering it rather as an intermediate condition, a state of transition between the neuroses and psychoses in which anxiety predominates, and which sooner or later becomes identified with neurasthenia or anxious melancholia. Hartarberg's contention is that, while this occurs in some cases, on the other hand there are pure cases of anxious neurosis without neurasthenia or melancholia, which get well spontaneously or under treatment without such contingency.

H. J. MACEVOY.

Contribution to the Study of Insanity by Contagion [*Contribution à l'étude des folies par contagion*]. (*Arch. de Neurol.*, 1903, No. 86.) Carrier.

Insanity by contagion as a more general definition is preferred by the author to *folie à deux*. After reviewing the history of the subject he analyses the pathogenic elements of the condition. Two principal ones are essential : contagion and morbid suggestibility or predisposition ; the former is the suggestion of a diseased mind acting upon one or more healthy minds, which react according to the more or less predisposition which they offer. This suggestion may be reduced

to three factors: imitation, persuasion, and intermental action (Tarde.) Intermental action consists in the physical, physiological, psychological, and social conditions under which two or more individuals live together. These three factors generally act together; but one factor may predominate over the others—as, for example, imitation predominates in such emotional or impressive forms which strike the imagination as mania, melancholia; persuasion is the principal factor, on the contrary, in systematised delusional forms. In simultaneous insanity intermental action plays the important part. In imposed insanity, on the other hand, the variable element is not any of these three factors, but the resistance to suggestion. The uniting link between the two essential elements, suggestion and predisposition, is what Marandon calls the morbid impression—which forms a third element.

As regards the determining causes of the onset of insanity by contagion, we may also consider three groups: the first, which accentuates the element of suggestion (a prolonged life in common, the habitual ascendancy of the patient over those about him, the likelihood of the delusions in delusional cases, etc.) In the second group, the causes affect the predisposition (misery, sickness, intoxications, excesses of all kinds, etc.) The third group of causes are related to the impression produced by the delusional phenomena, and, from this point of view, we may divide the forms of insanity into the impressive and the convincing. The impressive forms (manias, melancholias, etc.) strike the imagination, and are more contagious in proportion as the patient appears more insane. The convincing forms are the systematised delusional states, which are, on the contrary, most contagious when they are least obvious—as delusions of persecution, delusions of grandeur. Clinically the author considers three forms: imposed insanity (type Lasègne-Palret); simultaneous insanity (type Régis); communicated insanity (type Marandon). The characteristic of the first type is that the passive subject does not build up delusional phenomena peculiar to himself along with those imposed upon him by the active subject; his disorders are identical with those of the active subject, and disappear when the suggestive influence of the active subject disappears. In the second type we observe the simultaneous development of the same delusional form by the reciprocal influence of two predisposed persons in contact with each other. It is not a case of one subject being active and the other passive; morbid suggestion acts especially by intermental action, and by unconscious imitation. The third type is differentiated from imposed insanity by the fact that the passive subject, under the influence of the morbid suggestion of the active subject, builds up a delusional state in which certain delusions are peculiar to himself, and depend upon the predisposition, the soil; and others are communicated by the active subject. In the last form the subject passes, so to speak, through three successive stages: the first of cerebral disturbance (shaking), in which the delusions of the active subject are accepted; the second, in which are manifested true delusional phenomena corresponding to those of the active subject; and the third, generally running into the second, in which appear the delusions peculiar to himself. Notes of cases are given. Separation of the active from the passive subject is of great importance, and under

these circumstances one often notices in the passive subject a marked diminution in the intensity of communicated delusions. Medico-legally, the passive subject is in all these forms to be looked upon as irresponsible for his acts, although most authors do not entertain this opinion as regards the passive subject in cases of imposed insanity.

H. J. MACEVOY.

A Case of "Tic"! Cure [Un cas de maladie des tics ; guérison]. (Arch. de Neurol., 1903, No. 93.) Bourneville and Poulard.

The interest of this case lies in the fact that it was cured after being in existence five years—"tic" being usually looked upon as an incurable disease. Full notes are given, as is usual with Bourneville. The patient, a girl æt. 12, had a variety of "tics" complicated with coprolalia. The movements were sudden, rapid, impulsive, involuntary, and especially prominent on the part of the tongue; after moistening of the cheeks and lips by this organ, the rough wiping of them led to excoriation and even ulceration. Breathing exercises and gymnastics proved most useful, and weekly *séances* of suggestion in the waking state (*i. e.*, not with hypnotic sleep) completed the cure in time. Several months after leaving the Fondation Vallée (in which she stayed over two years) she was reported to be still free from tics.

H. J. MACEVOY.

Hysterical Mutism without Agraphia [Mutisme hystérique sans agraphie] (Rev. de l'hyp., 1903, No. 11.) Raymond.

This is the case of a man shown at the Salpêtrière, who, while hearing and understanding all that is said to him, cannot pronounce any words or even syllables. He can sing a tune; he has no difficulty in writing. The movements of the tongue are free, but he presents a slight degree of right facial paresis (the naso-labial fold is less pronounced; the labial commissure is lowered on that side). The tongue is large and slightly ulcerated. The illness came on suddenly without emotion eight days before. The night before he had danced a good deal, drunk champagne, and gone to bed late. The condition of the tongue might suggest syphilis as a cause of some arteritis affecting the third left frontal convolution, hence loss of speech; but such a diagnosis would be wrong. There is no motor or sensory disorder; no narrowing of visual field; the larynx is normal; nothing abnormal with the organs of phonation. As regards the facial paresis, it is a false paresis, for slight contracture of the muscles is detected on close examination, which disappears with automatic movements. The case is one of hysterical mutism without agraphia. The patient has lost the memory of motor images of articulation; if necessary he will be hypnotised, and will easily get well. [The patient was cured in a fortnight by re-education of the speech.]

H. J. MACEVOY.

Perversion of Temperature Sensations [Perverse temperaturempfindung]. (Neurol. Cbl., Aug. 16th, 1903.) Alter.

The author recalls the fact that the term "perverted temperature sensation" (perverse oder conträre Temperaturempfindung), as origin-

ally used by Strümpell, referred to cases where, owing to the failure of some part of the peripheral or central mechanism, there was a loss of one of the forms of thermal sensibility, so that all thermal stimuli alike gave rise to one and the same sort of sensation. In such a condition, however, there is, properly speaking, no perversion of sensation; there is essentially a unipolar thermal anæsthesia. The term would more fittingly be applied to cases where, while both forms of sensibility are retained, there is an inversion of the ordinary relation of stimulus to sensation, so that cold is perceived as heat and heat as cold. It is an instance of this very much rarer condition that Dr. Alter reports in the present paper.

The patient was a man æt. 45, who had shown symptoms of general paralysis for some two and a half years. When he came under the author's care he was found to present, in addition to other disorders more or less frequent in that disease, a curious inversion of the temperature sense: ice-cold water was invariably perceived as warm, water at 80° C. as cold, and in differential testing the cooler temperature was always perceived as warmer. In common with other forms of sensibility, thermal sensibility was dull, so that differences of 2° to 3° C. were not distinguished. The same inversion of thermal sense was found when hot and cold fluids were introduced into the mouth. When the patient was placed in a tepid bath and the temperature was gradually raised without his knowledge to 38·5° C., he complained of cold and shivered; lowering the temperature to 30° C. provoked complaints of excessive heat, with flushing of the face and sweating on the forehead.

There was reason to think that the condition was of quite recent development. It persisted unchanged for some fifteen days, when the patient had a severe congestive attack, ending fatally.

Discussing the case, the author hazards the theory that owing to the thermal hypo-anæsthesia the patient had to make a special effort of apperception, and that this effort had an inhibitory effect on the paths of secondary identification, so that what might be termed a state of psychic anelectotonus resulted, bringing the patient for the time being to a condition of unipolar thermo-anæsthesia.

The author notes that in the only case of this inversion that he has seen in recent literature (*Tumpowski in Medycyna*, 1898, No. 13) the patient suffered from hysteria, and in this connection touches on certain affinities between that disease and general paralysis.

W. C. SULLIVAN.

3 Pathology of Insanity.

On a Morbid Change in the Corpus Callosum observed in Alcoholic Subjects [*Sopra un 'alterazione del corpo calloso osservata in soggetti alcoolisti*]. (*Riv. di Patol. nerv. e ment.*, vol. viii, p. 544.)
E. Marchiasava and A. Bignami.

This is an important paper, as every one in asylum practice has opportunities of testing the frequency of the condition described once

attention is drawn to it, while, on the other hand, it has probably escaped notice in the past.

The authors have observed thrice within a few years a characteristic change in the corpus callosum in alcoholic patients. The first of these cases dates from 1897, and has been published by their pupil, Dr. Carducci. The other two were unpublished till this paper appeared in December, 1903, during which year the last of them was observed. In all the clinical history is scanty and imperfect, but in all the common factor, alcohol, was unmistakably potent. All three presented a morbid change so constant in character that it is possible to describe it in almost identical terms in each case. No important alteration was found in the mantle, nor in the basal ganglia, nor in the cerebellum, bulb, or pons; but a lesion was met extending to the entire corpus callosum. On section this body presented interiorly a diffused grey colour, while its surfaces, dorsal and ventral, preserved their normal appearance. The change engaged the entire body (*truncus corporis callosi*), and ceased abruptly a few millimetres beyond the emergence of its fibres from the white substance of the hemispheres, not engaging the radiation. The specimens were preserved in Müller's fluid, and subsequently stained with carmine, with hæmatoxylin and eosin, and also by the Weigert-Pal method. Microscopic examination shows that the two above-mentioned dorsal and ventral layers consist of normal nervous tissue, in which the nervous fibres are distinctly seen, disposed mostly in a transverse direction. The central portion, which forms about two thirds of the total thickness of the corpus callosum, presents to low magnification, with carmine, or eosin, and hæmatoxylin, the appearance of being somewhat rarified, as if less compact than normal, shows manifest increase in vascularity, and has gorged blood-vessels; the neuroglia nuclei are increased in number, though not greatly. A higher power confirms these appearances, and shows that the nuclei of the neuroglia are somewhat swollen, and also the endothelial nuclei of the small vessels. Various small vessels, especially some arterioles, are surrounded by a hyaline zone, probably resulting from hyaline degeneration of the perivascular neuroglia. The great mass of tissue is obviously composed of a network of neuroglia and naked axis-cylinders, and owes to this its diminished consistence and grey colour. The Weigert-Pal preparations show well the destruction of the medullary sheaths in the central two-thirds of the frontal sections, the sheaths being preserved in the dorsal and ventral layers already referred to. Near the raphe, particularly in the middle and posterior thirds in the sagittal plane, degeneration is less intense, and many fibres are seen to be preserved. In some preparations, where general degenerative changes are more advanced, there are small recent hæmorrhagic infiltrations and small lacunæ apparently empty, like small serous cysts.

The degenerative changes described extend a few millimetres into the centrum ovale and stop abruptly.

In connection with the general pathology of these conditions, the authors glance at the old question of whether degeneration is primarily interstitial or nervous without drawing any very definite conclusion. They point out the special features of these cases: degeneration of the medullary sheath, the axis-cylinders being mostly preserved; the for-

mation of granule cells, and proliferation of neuroglia; the strict local limitation of the process, which is not to be confounded with ordinary hæmorrhagic encephalitis; and the absence of any secondary degeneration.

CONOLLY NORMAN.

4. Sociology.

The Evidence of Hysterical Persons in Forensic Practice [*Sulla valutazione delle denunce e testimonianze delle isteriche nella pratica forense*]. (*Riv. sper. di Freniatr.*, vol. xxix, fasc. 1, 2, 1903.) Biondi.

The author takes exception to the tendency which, he alleges, exists at present in medico-legal practice to refuse all credence to the evidence of hysterical subjects. In support of his view that each case should be judged on its own merits, he quotes from his forensic practice an observation of a woman, undoubtedly subject to convulsive hysteria, who charged a man with indecently assaulting her. The defence rested mainly on the assumption that charges of this nature made by a hysterical woman were *à priori* likely to be false. The matter was referred to the author who, on examining the woman, found that though certainly subject to hysteria, she showed no stigmata of degenerescence, no ethical anomalies, and none of the intellectual disorders which characterise the hysterical liar. The story she told was consistent and free from exaggeration. On these grounds he concluded that, despite the existence of the neurosis, there was no reason for rejecting her evidence.

As a contrast to this case the author cites another observation where the falsity of the charges made by a hysterical woman could be fairly presumed from the evidence of grave moral and physical anomaly shown on examination, and by the fantastic and incoherent character of the accusations. The two cases are reported in detail. The author's general conclusion is that the hysterical witness is to be held normally credible if her hysteria is, "so to speak, more sensory-motor than psychic, if she shows no intellectual disorders, no anomalies of character, no notable over-activity of fancy, no undue readiness of emotional reaction, if what she asserts is nowise romantic or fantastic, and is in agreement with what others have seen and heard."

W. C. SULLIVAN.

The Simulation of Insanity [*Contributo allo studio della simulazione della pazzia*]. (*Il Manicomio*, anno xix, No. 1, 1903.) Garbini.

Dr. Garbini records in this paper thirteen cases of the simulation of mental diseases examined by him in the asylum of Messina. The number, as the author points out, is rather large to fall within the experience of a single observer in a relatively short period, and he believes with Penta that the explanation is to be found in the peculiarities of temperament in Southern Italy, of which region all but two of the malingerers were natives.

Five of the individuals belonged to the army, and seven were criminals under sentence. All of them showed distinct evidence of mental defect. According to the character of that defect the author classes his cases in three groups:—(1) Three were pure psychopaths without criminal tendencies; (2) four were degenerates with criminaloid tendencies; and (3) six were criminal defectives. They all had bad heredity, insane, toxic, or criminal; and all bore numerous physical stigmata of degenerescence, and presented more or less grave emotional anomalies and an extreme defect of critical power. In several of the cases, besides the fundamental state of debility, there were symptoms of pronounced insanity; some had paranoiac ideas; others were subject to episodic attacks of a hallucinatory or confusional type; others developed mental disease subsequent to their simulation. In these latter cases the genuine psychosis was of the same type as that simulated.

The forms of insanity simulated were always those with a basis of dementia. In all cases the motives were trivial—to escape military service, to obtain some petty privilege, etc. The simulation was never kept up for long, and was usually avowed by the malingerer without much hesitation.

The observations thus go to support the view held generally by those who have actual experience of such cases, that the simulator of insanity is rarely if ever sane. The paper is completed by a very useful list of the literature of the subject.

W. C. SULLIVAN.

The Biological Factors of the Somato-psychic Individuality of the Criminal in Complex Relation with the other Factors, Physical and Social [*I fattori biologici della individualità somato-psichica criminale nel complesso degli altri fisici e sociali*]. (*Il Manicomio, anno xix, No. 1, 1903.*) *Del Greco.*

Del Greco has signalised himself among Italian criminologists by his insistence on the need of a synthetic point of view to control and modify the results of studies limited to particular aspects and factors of criminality. His influence in this respect should be peculiarly useful as a corrective of the one-sided tendency which has marked a good deal of the work of the Italian school, and which was no doubt inevitable in the reaction from the metaphysical theories of crime.

In the present essay his main aim is to show how the biological factors of the criminal personality act on and are acted on by the other factors, physical and social, so as to form one interdependent complex.

Having pointed out that with the progress of social evolution there is an increasing influence of the social *milieu* on the biological individuality, he emphasises the importance of this consideration in regard to the meaning to be attached to the term "atavism;" the degenerate, assuming that his degree of dehumanisation may, in a measure, correspond with an earlier phase of psychic development in the race, can still show such atavistic aptitudes only in so far as he finds in the existing social *milieu* the conditions to elicit and develop them. And as this can only happen to a very limited extent, it comes about that the psychic atavism of the criminal is, for the most part, evidenced

merely by the dominance and exaggeration of the appetites and impulses which, in the civilised man, are controlled by his higher and more complex associations. This view of the criminal appears to aim at reconciling Lombroso's theory of atavism with the opposed theory of degenerescence; but it may be observed that so far as it fulfils that aim, it does so by emptying the atavistic hypothesis of whatever special meaning it had.

Proceeding, the author classes the criminal, like the insane in thought, broadly, according to the degree of their psychic and somatic degenerescence, into predisposed, higher and lower degenerates; and indicates very briefly how in each case the original tendency of the individual, the predominant impulse, shows through the disorder of conduct as of intellect. He then discusses the manner in which this original bent is influenced, favourably or the reverse, in various groups of individuals, by the factors of age, sex, temperament, social class, and race.

On the last two factors he lays special stress. He points out that, though they are primarily of the social order, they imply conditions which influence not merely psychic but anatomical characters. Thus the division of labour and of wealth must lead to differences in physical development, in strength and beauty, as well as in manners of thought in the various classes of the same race; and the differences in tradition and in the level of culture which separate races must similarly count for something in moulding their organic types. These variations are to be borne in mind in studying crime and insanity; the same criminal impulse, like the same physical stigma or the same delirious conception, has very different meanings in different races and in different classes of the same race.

This view of crime as the natural expression of an individuality formed by the long-sustained interaction of many complex forces, biological, cosmo-telluric, social, necessarily makes the author sceptical as to the value of the usual methods designed to reform the individual criminal. But, on the other hand, inasmuch as all these forces are modifiable directly—and indirectly, one through the other,—it gives unlimited scope to the optimist who is content to place his Utopia several generations in the future.

W. C. SULLIVAN.

Correspondence.

CHRISTIE AND OTHERS *v.* SIMPSON AND OTHERS.

To the Editors of THE JOURNAL OF MENTAL SCIENCE.

DEAR SIRS.—In the January number of *The Journal of Mental Science*, among "Notes and News," and under the heading "Recent Medico-Legal Cases," I have read a notice of the above case. In this notice a summary of the case is given so far as it went, a definite opinion

is expressed, and a judgment is pronounced upon it. May I point out that the case was settled before any evidence for the defence was led, and that there was no judicial decision given, the settlement being by consent? Under these circumstances, as it has absolutely no legal value, the case will not be reported in the legal records, and it will form no precedent.

Nor has it any medical or scientific value. To record one side of such a case in a scientific journal and then to express a definite opinion and pronounce a definite judgment is a most deplorable and regrettable incident, utterly unworthy of the scientific spirit that should regulate the opinions and judgments of our profession.

I would add that in the last eight months of his life, during which time I attended him professionally, Mr. Christie did not exhibit a single sign or symptom of mental alienation with regard either to business or family relations, and none of his family suggested to me that he either had been, or was, of unsound mind. It is perfectly certain that he never suffered from pernicious anæmia. The notice of this case, above referred to, is a painful and absurd caricature of the actual facts.

I am, yours faithfully,

THOMAS R. RONALDSON, M.B., F.R.C.P.E.

8, Charlotte Square, Edinburgh.

March 10th, 1904.

[Our report of the case was accurate and fair. The "definite opinion" and "definite judgment" which Dr. Ronaldson regards as "deplorable and regrettable" were as follows:

"In the event, the jury were not called upon to deliver a verdict, the case being settled on terms, amongst which the restoration to the daughters of the testator of all the furniture, pictures, silver, curios, etc., was included. It may therefore be concluded that the unsoundness of the testator's mind was practically admitted, although the last will was allowed to stand."

The contention of the plaintiffs or pursuers was that, in bequeathing or donating these valuables to the orphanage, the testator was not of disposing mind, and that, therefore, they ought to be surrendered by the orphanage to the pursuers. The settlement provided that they should be so surrendered; and, in so providing, it "practically admitted" the soundness of the contention of the pursuers and the unsoundness of the testator's mind. What admission could be more practical?

In saying that "it is perfectly certain that he (the testator) never suffered from pernicious anæmia," Dr. Ronaldson sets at naught the evidence of thoroughly competent members of his own profession, who attended the deceased at the time he suffered from the illness in question, and whose evidence on oath was not shaken by cross-examination.

Dr. Ronaldson calls our report "a painful and absurd caricature of the actual facts." If he will particularise a single statement, opinion, or expression which is not justified to the letter by the shorthand notes of the trial, we will apologise and correct it. If he cannot do so, he must allow us to apply his own expression to his own letter.—C. M.]

To the Editors of THE JOURNAL OF MENTAL SCIENCE.

DEAR SIRs,—“The shorthand notes of the trial” which Dr. Mercier made use of in his report consist only of evidence led for the pursuers. The presentation of the case was therefore most incomplete, and “a painful and absurd caricature of the actual facts.”

Dr. Mercier's report being “accurate and fair” is, therefore, of necessity also “a painful and absurd caricature of the actual facts.” His first error lies in reporting such an incomplete and scientifically useless case, and in expressing a definite opinion and pronouncing a definite judgment on it. The result is a report entirely misleading to the readers of the JOURNAL. In his comment on my letter of the 10th inst. he avoids any allusion to this contention, which is plainly stated.

His second error consists in two false assumptions: (1) that because the case was settled by consent before the trial (which was before a jury) was fought to a finish, “the unsoundness of the testator's mind was practically admitted;” and (2) that because evidence on oath is not shaken by cross-examination that evidence is accurate.

As this JOURNAL is written for men of knowledge and experience, I need say nothing further on these points.

The gravamen of my complaint is that Dr. Mercier has listened to only one side of a story, that he has made inexcusable assumptions, and that, having with such materials and on such a basis expressed “a definite opinion” and pronounced “a definite judgment,” we have as a result—shall I say, a mistake.

As an illustration of the one-sidedness of the material Dr. Mercier has employed, Sir Thomas R. Fraser permits me to say that, having been called by Mr. Christie's late (deceased) town medical attendant to see him as a case of pernicious anæmia, he examined the blood on two occasions, and that these examinations incontestably proved the absence of pernicious anæmia and the presence of ordinary anæmia; further, that Professor McKendrick, who examined the blood previously, repudiates the result of his examination as proving the existence of pernicious anæmia.

I am, yours faithfully,

THOMAS R. RONALDSON.

8, Charlotte Square, Edinburgh;

March 23rd, 1904.

[Dr. Ronaldson admits that my account of the proceedings at the trial was accurate and fair. As I did not pretend to give an account of anything but the proceedings at the trial, I am content with the admission. My impression, on reading the first letter, was that he intended to charge me with inaccuracy and unfairness.

So far from avoiding any allusion to Dr. Ronaldson's contention, I met it as far as I understood it. It now appears that I did not understand it aright; and that what he characterised as a painful and absurd caricature of the facts was not, as I thought, my report of the trial, but the statements made at the trial. My first error, he says, is in reporting such an incomplete and scientifically useless case; by which I take it that he means that I had no business to report a case of which

only one side had been presented. But he omits a vital consideration. I took account, not only of the pursuer's statement, but of the settlement which was agreed to by the defenders, and which embodied their estimate of their own case. This settlement clearly indicated, in my opinion, that the defenders admitted the unsoundness of mind of the testator. Dr. Ronaldson contends that it did not. This is the first part of my second error. Whether it is an error or not, I must leave the reader to judge. My last error is that I assumed that evidence, given on oath, and unshaken by cross-examination, is accurate. This does not appear a very serious charge, or to warrant Dr. Ronaldson's adjectives "deplorable and regrettable," even if it were true. But it is not true. My *obiter dictum*, that the unsoundness of mind from which the testator suffered was the consequence of his attack of pernicious anæmia, does not warrant the charge. All that it warrants is that evidence, given on oath, and unshaken by cross-examination, must be accepted. This may be an error, but it seems scarcely serious enough to justify Dr. Ronaldson's language.

Dr. Ronaldson's complaint that I have listened to only one side of a story has already been dealt with. The other side of the story was embodied in the settlement, to which the defenders would not have consented if they had thought that the presentation of their case would have induced the jury to give them better terms. It admitted, in the most practical manner possible, that they could not traverse that part of the pursuer's case which demanded the restoration of the valuables, and was equivalent to a formal declaration to that effect.—C. M.]

Notes and News.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

THE GENERAL MEETING was held at Warneford Asylum, near Oxford, on Friday, February 12th, 1904. Dr. Ernest W. White, the President, occupied the chair.

The following members were present:—Drs. W. Lloyd Andriezen, Joseph S. Bolton, David Bower, George Braine-Hartnell, Robert H. Cole, Sydney John Cole, Thomas S. Good, Edwin Goodall, Theo. B. Hyslop, J. Carlyle Johnstone, Robert Jones, Arthur B. Kingsford, Reginald L. Langdon-Down, Henry C. MacBryan, Peter W. Macdonald, John Marnan, Alfred Miller, Cuthbert S. Morrison, James Neil, H. Hayes Newington, James F. G. Pietersen, Daniel F. Rambaut, Henry Rayner, R. Heurtley Sankey, George E. Shuttleworth, R. Percy Smith, J. Beveridge Spence, Rothsay C. Stewart, James Stewart, T. Seymour Tuke, T. Outterson Wood.

Apologies for non-attendance were read from Drs. Boycott, Turnbull, Wiglesworth, and Yellowlees.

Visitors:—Rev. Hayward Cummings, Dr. Collier, Dr. Thomson, Mr. A. F. Bradshaw (Oxford), Dr. W. Tyrrell Brooks, Mr. Shuttleworth, and also the Chairman and Vice-Chairman of the Warneford Asylum Committee.

At a Meeting of the Council, held on the same day, the following were present:—Dr. Ernest W. White (President), George Braine-Hartnell, Theo. B. Hyslop,

Robert Jones, Henry C. MacBryan, Peter W. Macdonald, Alfred Miller, H. Hayes Newington, Henry Rayner, R. Percy Smith, J. Beveridge Spence, Rothsay C. Stewart.

The following gentlemen were elected ordinary members of the Association:—Barham, Guy Foster, M.B., B.A., B.C., M.R.C.S., L.R.C.P., Assistant Medical Officer, London County Asylum, Claybury, Woodford Bridge, Essex (proposed by C. T. Ewart, Robert Pugh, and Robert Jones); Cross, Harold Robert, L.S.A., Assistant Medical Officer, West Riding Asylum, Wakefield (proposed by W. Bevan Lewis, W. Maule Smith, and T. Stratford Logan); Hughes, William Stanley, M.R.C.S., L.R.C.P., Assistant Medical Officer, London County Asylum, Claybury, Woodford Bridge, Essex (proposed by C. T. Ewart, Robert Pugh, and Robert Jones); Ludovici, E. (late Medical Officer of Asylum in Australia), 117, York Street, Sydney, N.S.W. (proposed by R. Percy Smith, C. T. Ewart, and Robert Jones); Lyall, C. H. Gibson, L.R.C.P. and S.Edin., Senior Assistant Medical Officer, Cumberland and Westmoreland Asylum, Garlands, Carlisle (proposed by W. F. Farquharson, Evan Powell, and W. J. A. Erskine); Macnamara, Eric Danvers, M.B., B.Ch.Camb., Medical Registrar at the Westminster Hospital, 45, Campden House Road, London, W. (proposed by Maurice Crag, Theo. B. Hyslop, and W. H. B. Stoddart); Miller, James Webster, M.B., Ch.B.Aber., Assistant Medical Officer, Warneford Asylum, Oxford (proposed by James Neil, Thomas Saxty Good, and David Bower); Nicholl, Robert Campbell, L.R.C.P.I. and L.R.C.S.I., Assistant Medical Officer, Hatton Asylum, near Warwick (proposed by Alfred Miller, E. B. Whitcombe, and Arthur Wilson); Wood, Martin Stanley, M.B., Ch.B.Vict., Assistant Medical Officer, Royal Asylum, Cheadle, Cheshire (proposed by W. Scowcroft, John Sutcliffe, and P. G. Mould).

Dr. NEIL entertained the members to lunch at half-past-one.

Dr. ERNEST W. WHITE presided at the afternoon session.

Dr. ROBERT JONES showed microscopic specimens of the *Trypanosoma* of Sleeping Sickness, kindly lent for this meeting by Sir Patrick Manson, K.C.M.G., F.R.S. (see page 256).

The PRESIDENT asked Dr. Jones to convey the thanks of the members present to Sir Patrick Manson for the loan of the microscopic slides, which gave such an excellent demonstration of the *Trypanosoma* associated with Sleeping Sickness. He did not think that one could associate it with any definite form of mental disease.

Dr. LLOYD ANDRIEZEN read a paper entitled "The Problem of Heredity, with Special Reference to the Pre-Embryonic Life," and gave a lantern demonstration.

The PRESIDENT thanked Dr. Andriezen for his demonstration upon Embryology. He had led his audience by easy stages through the life-history of the embryo, and shown on the screen the various phases of its development, suggesting how individual peculiarities of habit, action, and character are possibly transmitted from the parents to the offspring.

Dr. ROBERT JONES read a paper entitled "The Psychology of Jane Cakebread" (see page 219).

The members dined together in the evening at the Randolph Hotel, Oxford.

RECENT MEDICO-LEGAL CASES.

REPORTED BY DR. MERCIER.

[The Editors request that members will oblige by sending full newspaper reports of all cases of interest as published by the local press at the time of the assizes.]

In re Annie Campbell Brabason.

Mr. Justice Ross and a special jury had before them the question, raised in an inquisition, as to whether this lady was of unsound mind and incapable of managing her affairs. It appeared from the evidence that she is a lady of means, and of good

education, and refined habits and manners, when sane and sober. But her family history was most unfortunate, two of her four brothers having died insane, and a third had been under restraint. She herself had been twice under care, once at the age of eighteen, and again ten years later. For years past she had been so eccentric in her habits that she was notorious in the town in which she lived, and the children followed her about the streets, attracted by her behaviour. She was violent to her servant, she smashed her furniture, and lately she had not only given way to drink and haunted public-houses, but had formed an attachment for, and got engaged to be married to, a drunken carman with whom she used to drink in public. She would have married him, but that he was a Catholic and she a Protestant, but she got over this difficulty by becoming a Roman Catholic, and it was understood by her brother that she was to be married immediately. Under these circumstances her brother had her certified as a lunatic, and placed in St. Patrick's Hospital. Under the treatment there, and deprivation of alcohol, she greatly improved; so that at the time of the inquisition, some three months afterwards, she was, to the non-expert observer, sane.—Dr. Conolly Norman deposed that the lady was of very weak mind and incapable of managing her own affairs. He had had an interview with Dr. Brabazon, her brother, before seeing the patient.—Mr. T. Healy: "Did you put to him any one of the inquiries which a doctor going to certify on an interested report of an interested person would ask?" To this extraordinary question Dr. Norman wisely refrained from replying.—Dr. Brabazon, whose petition stated that the defendant was and had been for twelve months of unsound mind, had to admit, in cross-examination, that nine months before the trial she accepted a bill for him, and subsequently he joined with her in the sale of some property.—Dr. Leeper, superintendent of St. Patrick's Hospital, described the patient's condition on admission and her subsequent improvement. She had gained fourteen pounds in weight, and was in better health, but was still of weak mind. He was severely cross-examined as to his having refused to allow her to execute the documents necessary to furnish her solicitor with funds for her defence. Had he been in this country, he might have quoted the circular of the commissioners, warning those who have the care of certified patients not to allow, and to do all they can to prevent, such patients from executing documents, or dealing with property. Dr. Leeper admitted that the respondent was not now obviously insane.—Mr. Healy: "Leave out obviously. Is she insane?"—"She is not to the ordinary observer insane."—Various witnesses deposed to the extraordinary acts of the respondent, amongst them the head constable of the police; and it indicates the peculiar considerations which influence juries in Ireland that Mr. Healy endeavoured to elicit from this witness how many of the police in Castlebar were of the Protestant religion! The judge of course disallowed the question, upon which Mr. Healy remarked, "Very well, *I will put it to the jury when I come to address them.*"—Dr. Knott deposed to various facts of the family and personal history of the patient, which had been alluded to, and said that he had honestly come to the conclusion that it would be a mercy to have her under some restraint; but in cross-examination he admitted that he had made up his mind before he saw the patient, and that the examination was to a great extent a formality.—Dr. Hatchell, who had been associated with the previous witness in signing the certificate (in Irish law one certificate signed by two medical men is required), made the same admission.—After this, the result of the case was a foregone conclusion: The respondent was examined in private by judge and jury, and from the summing up it is clear that she impressed them very favourably as to her intelligence and capability. On their return, the jury intimated that they did not wish to hear any evidence on the part of the respondent, and brought in a verdict that she was not of unsound mind, nor incapable of managing her affairs.

The verdict was the only possible one under the circumstances, but in the interest of the respondent it is undoubtedly to be regretted. It was proved that before her detention she was spending her patrimony recklessly; that she, a lady of education and refinement, was determined to marry a drunken carman; that she gave way to drink and made herself an object of scorn and contempt to the whole town in which she lived. The astonishing improvement in her condition, and the standard of intelligence and capability which she had regained, and which so impressed the judge and jury at the trial, were due solely and entirely to the fact that she had been placed under care, and was under care at the time of examination. The obvious inference,

to an unprejudiced jury, would have been that this great and striking improvement showed how necessary to her welfare the mild restraint of the court must be. But apart from the damaging cross-examination of Drs. Brabazon, Knott, and Hatchell, which of itself was enough to carry conviction to the intelligence of the ordinary juror, counsel for the respondent did his utmost to impart a rancorous religious prejudice into the case, so that his client got with the utmost ease a verdict which will probably prove to be her destruction.

COURT OF APPEAL.

(Before the Master of the Rolls and Lords Justices Romer and Mathew.)

This appeal arose out of an action brought by a farmer's grazier named Pope, of Draughton, Northamptonshire, against several defendants for alleged conspiracy to place and keep him in the Berrywood Asylum as a lunatic whilst he was of sound mind. The defendants were John and Sidney Philip Pope, John Goodman (relieving officer for Brixworth), Dr. Wainwright (medical practitioner), Dr. William Harding (medical superintendent at the Berrywood Asylum), and May Pope (the plaintiff's wife). Plaintiff alleged against all the defendants other than Dr. Harding that they maliciously conspired to imprison him in the asylum; and further, he alleged against them all, including Dr. Harding, that they had conspired to detain him, after getting him in the asylum, from September 8th, 1899, to November 10th, 1899. The claim asked for £10,000 damages.

The present appeals were brought—first, by Dr. Wainwright, from a decision of Mr. Justice Bucknill in chambers refusing to stay all further proceedings in the action against him; and second, by the plaintiff, from a second order of the same judge staying all proceedings as against Dr. Harding.

Mr. Lush, K.C., on the first appeal, contended for the plaintiff that a *prima facie* case had been made out that Dr. Wainwright had not acted *bond fide* and with reasonable care.

Lord Justice Romer: Do you really ask us to say that Dr. Wainwright did not really think the man insane?

Mr. Lush: I say there is *prima facie* evidence to that effect.

Lord Justice Romer: Good gracious!

After further argument, and without calling on Mr. Tindal Atkinson, K.C., to reply,

The Master of the Rolls said plaintiff was unable to point to any technical flaw in the proceedings under the Lunacy Act. The plaintiff was undoubtedly committed to the asylum by a magistrate's order. Everything seemed to be in conformity with Section 16 of the Lunacy Act. There was no shadow of case of any misconduct, or malice, or want of reasonable care against Dr. Wainwright. The appeal would, therefore, be allowed, and action stayed as against that defendant, with costs.

The lords justices concurred, and the appeal was accordingly allowed.

Mr. Lush, K.C., did not proceed with the second appeal involving Dr. Harding, and that was dismissed with costs.

THE HUMOURS OF IRISH ASYLUM COMMITTEES.

Cork and Youghal.—We had occasion to draw attention in our last number to the angry passions which seem to be excited at the meetings of the Cork Asylum Committee when the question of the auxiliary asylum at Youghal comes up. The *Cork Examiner* of February 10th gives an account of a meeting of Committee held on the previous day at which there was the usual scene. On the question of how some obvious and perfectly trivial error crept into certain documents, charges of "cooking" the minutes were repeated and charges of "evading the minutes" added. A fiery discussion, occupying almost three columns of the newspaper, ended (for the time at least) in a general retreat on the part of everybody. Apparently it was found impossible to fix any definite blame upon the medical superintendent. By as much as that gentleman is discredited, and by as much as his staff are encouraged to oppose him, by so much is the danger of his venturing to criticise the auxiliary arrangements diminished.

Buttons !—Wasn't it Mrs. Gamp who complained of the "imperence of them boys in buttons?" A similar sentiment appears to rankle in the mind of a certain member of the Cork Asylum Committee who, coming to the usual monthly meeting in March, was struck all in a heap by finding that the gate was opened by a myrmidon who bore on his cap a button with the royal crown emblazoned upon it. Restraining his natural indignation till he reached the committee room he there opened his heart to his colleagues. With unanimity and a vigour calculated to make all the monarchs of Europe shake it was resolved that crowns were to be no more. Whether buttons were to follow does not appear quite clearly, but judging by the costumes in which Mr. Benson's company act Irish plays, in which buttons were conspicuously absent, we apprehend that the employees of the Cork Asylum will in future hold themselves together with early Irish safety pins, constructed, as we understand antiquarians believe, from the *aculei* of *Crataegus Oxyantha*. Be that as it may, one member, filled with the fire of poetry and the spirit of prophecy, said, "The crown will soon be a faded flower." We have heard that the greasing of the sepoy's cartridges was the cause of the Indian Mutiny. Perchance with them and Marie Antoniette's diamond necklace the buttons of the Cork Asylum will figure as the little things that gave rise to a great revolution!

Argumentum baculinum.—The following paragraph appeared in the Dublin *Evening Herald* of March 12th:—

"MR. JOHN O'DONNELL, M.P., seriously assaulted at Castlebar.—The election of a temporary assistant storekeeper to Mayo Asylum took place at a meeting of the Asylum Committee at Castlebar to-day. Amongst the candidates were James Daly, jun., and Wm. Cunnane, formerly League Organiser. Cunnane was elected by a majority of one vote, amongst those voting for him being Mr. John O'Donnell, M.P., who, it is understood, travelled over specially from London to support Cunnane. After the election Mr. O'Donnell, accompanied by Messrs. Heraghty and Brett, were leaving the asylum, when O'Donnell was attacked with a stick by a man whose name is alleged to be Michael Neary, and received a severe wound over two inches long on the side of the head. Mr. O'Donnell, who was bleeding freely, was removed to the porter's lodge, where the wound was dressed by Doctors Hopkins and Ellison. The police visited the scene immediately, and O'Donnell has signified his intention of making an information."

Another Dublin evening paper of the same date gives an account identical with the above, save that it contains a small additional matter which we think it would be wrong to keep from our readers. The *Evening Mail* inserts after the word "organiser" these words, "The candidates were submitted to a test in writing and arithmetic. The election was then proceeded with." It is pleasant to think that being a "League organiser" is not absolutely the only qualification required in Mayo for being an assistant storekeeper. The possibility of holding a test examination in writing and arithmetic at the meeting of an asylum committee (though it calls up quaint images to the dull Saxon mind) is also a charming proof of the accomplishments and versatility of the Castlebar Committee. The precise necessity for the bacillary appeal after the examination we cannot understand, perhaps because we lack the agile Keltic imagination. It is true we have known the stick applied after tests in writing and elementary arithmetic, but, alas! not to the examiner, nor usually to the *head*. In the far-off days when we were young and when we were accustomed to associate sticks with examinations, the application was generally fundamental and intended no doubt to reach the head indirectly by *contre-coup*. There is only one solution for this knotty question which the most profound cogitation is able to suggest. Can Mr. John O'Donnell, M.P., be the same stalwart gentleman who addressed the House of Commons in Irish, and can he have so far relinquished his principles as to come all the way from London for the purpose of examining a candidate for the post of assistant storekeeper in the Mayo Asylum in the writing and the arithmetic of the English tyrant? It is not specified that the examination in either of these branches of learning was conducted in Gaelic, so we fear that the latter portion of this question must be answered in the affirmative. This may well account for the wrath of the "alleged" Michael Neary. For why should the King's writing and arithmetic run in Connaught when the King's crown is kicked out of Munster?

OBITUARY NOTICES.

W. H. GARNER.

This old and respected member of our Association died on February 12th, 1904. He was born at Downpatrick seventy-four years ago. He was educated at Trinity College, Dublin, and took the degree of B.A. in the University of Dublin in 1853. He also held the Licence of the Edinburgh College of Physicians and the Fellowship of the Irish College of Surgeons. In his early professional career he practised for a while in the Lowlands of Scotland. He held among other appointments that of Surgeon to the "Scottish Borderers" Militia. In this capacity, though he never saw what the "combatants" call "active service," he had an experience of which to the last he was justly proud. Smallpox broke out among his corps, and he had no less than seventy sufferers from that disease under canvas in his care, and did not lose one—a result which was very remarkable at that time when unmodified smallpox was so much more common than now, and which would be very creditable even in modern days of re-vaccination and antiseptics.

In 1868 he was appointed Resident Medical Superintendent of the Auxiliary Asylum, which had been erected close to, but not in immediate connection with, the Clonmel Asylum. Experience soon showed him the impossibility of doing justice to the insane in a cheaply run auxiliary asylum and the positive cruelty of dooming patients to neglect by labelling them "incurable." In this spirit he wrote an article on Auxiliary Asylums, which attracted a good deal of attention at the time and was of much service to the cause he had at heart. On the death of Dr. Flynn, in 1870, Dr. Garner was promoted to the Medical Superintendency of the parent asylum. By obtaining the purchase of the lands lying between the two buildings and having a tunnel made there through under roads, etc., he connected the asylums topographically and worked them from a common centre. This condition has continued and worked well and economically as he foretold. In a little while he divided the buildings by the sexes of their occupants, placing in what had been the "auxiliary" male patients of all classes, instead of "incurable" patients of both sexes, and reserving the older asylum solely for women. At the present time it is interesting to recall the termination of the first Irish experiment in auxiliary asylums. Dr. Garner was ever most earnest in endeavours to improve the condition of the insane and prominent in all forward movements in our specialty. His asylum stood very high among the institutions of his country. He earned the warmest affection and respect from his official colleagues. Among the members of our specialty in Ireland he enjoyed the highest character as a physician and as a gentleman. He gave up active work in 1900, retiring on a pension after nearly thirty-two years' service. The remainder of his life he spent near Dublin. He was a man who joined in a remarkable way the two finest qualities of a gentleman, kindly courtesy and undaunted courage. The former endeared him to his associates, the latter supported him in the difficulties of his official career, and did not fail him in the last extremity of Nature. "I would fight the monarch on the throne if it were my duty," he often said, nor did he blench before another monarch. His medical advisers told him that the abdominal trouble (rectal tumour) from which he suffered would kill him unless he underwent an operation which his age and general condition would render highly risky. One of his friends, communicating to another the circumstances of his death, writes: "He was a brave old man. I was at a big 'at home' at his house just eight days before his death. He received his guests, joked, and talked with them, and was apparently in the best spirits. He then told me aside that he was 'sentenced to death.' I saw him again when he was in hospital, and he was as cool and placid as ever I have seen him."

Dr. Garner was twice married. Six children survive him, of whom one is a Major in the Royal Army Medical Corps, and holds high position in the Egyptian Public Health Department, where he is assisted by his brother, who is a civil surgeon in the same department.

R. V. FLETCHER.

Many members will have heard with regret of the death of Dr. Fletcher, who had been Superintendent of the Ballinasloe Asylum for close on thirty years. His student days were spent in Steevens' Hospital, where, as Resident Pupil, the many friendships which he formed with men who afterwards became eminent in other specialties stimulated throughout life his interest in professional subjects not directly connected with his own work. After qualifying he spent some time as physician to the Hon. David Plunkett, one of whose nieces he subsequently married. When Down Asylum was opened in 1870 he was appointed as Assistant to the late Dr. Tyner, being the first Assistant appointed to an Irish asylum.

After a few years there he was selected by the Government for the Superintendentship of the Waterford Asylum, where he found a well-stocked arsenal of obsolete armaments for the cure of disordered minds; and after a short period, made a bonfire of straight-waistcoats, anklets, and other therapeutic instruments. His action was the subject of admonition, protest, and warning from asylum officials and lay governors, who in a short time handsomely recognised the improvement he had effected. His good work had its reward in 1874 in his promotion by Government to the larger and more important District Asylum of the counties of Galway and Roscommon. Here he quickly formed hosts of friends, and in a short time his keen judgment, wide experience, and intuitive insight were so thoroughly trusted by the then Board of Governors that his advice was eagerly sought and confidently followed in all matters affecting the institution. Coming to an asylum which was then old as asylums go, he found many things to remedy, and effected many improvements. For several years he agitated on the subject of employment as a curative measure, and persuaded almost against their will the Governors to purchase a large farm adjoining, the management of which he carried out with much profit and benefit to the institution.

He then began to claim the provision of a modern hospital for the acute and sick. After much misgiving the claim was conceded and provision made in a manner satisfying the most exacting requirements and equal to anything to be found elsewhere. Socially he was a type of a kindly courtly gentleman, good natured, pleasant, and much sought after, with a keen sense of humour and a large fund of stories. Some years ago he was one of the best shots in the west of Ireland and an authority on all sporting matters. In the hierarchy of the Masonic order he held a high place. On the occasion of his silver wedding in 1897 he received a presentation of plate from his colleagues and the staff, with whom he was always most popular. Since the death of his wife, to whom he was much attached, he has gone but little into society, and after a lingering illness, he died on December 17th last, at the age of sixty-three; his old friends, Dr. Little, of Dublin, and Dr. Rutherford, and his senior assistant, Dr. Mills, attended him.

He leaves one daughter, married to P. S. Golding, Esq., Ballinasloe, who received from all public bodies in the district, resolutions of sympathy.

By his colleagues, to whom he was always a kind and trusted friend, he is much regretted, and he has left behind a memory of constant thoughtfulness for others and unflinching courtesy in all relations of life.

JOSEPH PEEKE RICHARDS.

We regret to announce the death of Mr. Joseph Peeke Richards, formerly superintendent of Hanwell Asylum. An obituary notice will appear in our next issue.

FOURTH INTERNATIONAL HOME RELIEF CONGRESS
(ASSISTANCE FAMILIALE).

PRESIDENT.—The Right Hon. Lord Balfour of Burleigh, K.T.

Vice-Presidents.—The Right Hon. the Lord Provost of Edinburgh; the Lord Provost of Glasgow; the Lord Provost of Perth; the Lord Provost of Dundee; M. le Duc Decazes; the Rt. Hon. the Earl of Aberdeen; the Rt. Hon. the Countess of Aberdeen; the Lady Kinross; the Lady Marjorie Mackenzie; Mrs.

Wauchope of Niddrie; Miss Flora Stephenson, LL.D., chairman of the Edinburgh School Board; Mrs. Garrett Anderson, M.D., London; the Hon. Morton G. Stuart Gray, of Kinfauns; the Right Rev. the Moderator of the Church of Scotland; the Rev. the Moderator of the United Free Church of Scotland; the Right Rev. Bishop Dowden; the Most Rev. Archbishop Smith; Sir Kenneth Mackenzie, Bart., of Gairloch; Sir John Batty Tuke, M.P.; Malcolm M'Neill, Esq., C.B., Vice-President Local Government Board; the President of the Royal College of Physicians, Edinburgh; the President of the Royal College of Surgeons, Edinburgh; the President of the Faculty of Physicians and Surgeons, Glasgow; Robt. T. Paine, Esq., Boston, U.S.A.; Dr. F. B. Sanborn, Concord, U.S.A.; M. le Dr. A. Marie, Paris; Dr. Peeters, Gheel, Belgium; Professor Tamburini, Milan; Dr. Alt, Uchtspringe, Germany; Dr. Van Deventer, Holland; Dr. F. Sano, Antwerp; John Fraser, Esq., F.R.C.P.E., H.M. Commissioner in Lunacy; Professor Sir Henry Littlejohn, M.D., LL.D.; Professor John Kirkpatrick, LL.D.; Conolly Norman, Esq., F.R.C.P.I., Dublin; C. S. Loch, Esq., London Charity Organisation Society; Chas. Booth, Esq., F.R.S., London.

Chairman of Executive Committee.—Sir John Sibbald, M.D., F.R.C.P.E.

At the Second International Home Relief Congress, held at Antwerp in September, 1902, it was agreed that in 1904 the Congress should meet at Edinburgh. Accordingly, on 16th June, 1903, at a large meeting, representative of the charitable organisations of Scotland, it was unanimously resolved that the Congress should be invited to meet at Edinburgh, as proposed. A committee was appointed, and the Congress has been fixed for Tuesday, 7th June, 1904.

The Right Honourable Lord Balfour of Burleigh has accepted the office of President, and will deliver the Opening Address in the Hall of the New College, Mound, Edinburgh, where the various meetings will be held.

The Objects of the Congress are explained in the following synopsis of a preliminary statement by Sir John Sibbald:

"We have endeavoured to make this preliminary meeting representative of Scotland, and not merely of Edinburgh, and our thanks are specially due to those who have come from Glasgow and other places at a distance. I shall endeavour to make my statement as short as is consistent with a clear explanation of the purpose of the meeting.

"As you are aware, a proposal has been made that the fourth of a series of annual international congresses shall be held in Edinburgh next year for the discussion of the ways in which aid can best be given to the distressed poor, in their own homes, or under conditions of home-like character. Two such congresses have already been held—one in Paris in 1901, and one in Antwerp in 1902. Another is to be held this year, the place selected for it being Bordeaux; and it was resolved at the Antwerp Congress that the meeting in 1904 should, if possible, be held in Edinburgh.

"It is scarcely necessary to say that though these congresses have solely in view the discussion of questions relating to home help, their motive idea is in no way antagonistic to that important branch of charitable work which is carried on in hospitals and similar institutions. The idea of holding these congresses arose, indeed, at a congress held in Paris in 1900, which dealt with charitable work of every kind, the work of hospitals and other institutions among the rest. But the discussions which took place in the section devoted to home help were found specially interesting. They showed clearly that the questions relating to home help present special problems and special difficulties of their own; and it was felt that these embraced so wide a field, and were of such urgent importance, that it was resolved that in future an independent congress should be devoted to their consideration.

"I have chosen the words 'Home Relief' as the best English rendering of what the French mean by '*Assistance Familiale*,' and it will be understood that this includes every kind of organised aid to the poor in their own or other private homes, whether outdoor relief under the Poor Law, or similar aid from either public or private sources.

"An idea of the work of the proposed congresses may be indicated by a reference to the proceedings at Paris in 1901. The meetings occupied the last five days of the month of October. The congress was divided into sections which

dealt with different branches of the work, according as it referred to children, to persons in the working period of life, or to the aged. The work referring to aid given at the working period of life was divided into two sections, one of which dealt with aid given in sickness, and the other with aid given for other reasons; and a separate section dealt with the care of the insane and the imbecile in private dwellings. The meetings of sections were held in the forenoons, and general meetings were held in the afternoons.

"The kinds of aid which formed the subject of discussion included, not merely the giving of material aid in the form of food, clothing, lodging, or money, or medical aid in the form of advice, nursing, drugs, and medical appliances, but also included the dissemination of useful sanitary and economic information, and the fostering of habits likely to develop health of body and of mind; and it also included a discussion of that most difficult and most important subject, the promotion of agencies likely to develop and stimulate the spirit of self-help.

"It would take up too much time were I to attempt in detail an enumeration of the subjects brought before the sections; I may, however, for illustration mention some of those dealt with in the section for children. I select the work of various charitable organisations which were described, and whose merits or demerits formed the subject of discussion. It seems useful to mention such work because it gives an idea of the directions in which the thoughts of French philanthropists have been turned in recent years, and of the increasing extent to which, in France, the importance of promoting the development of healthy and capable citizens is being recognised. One of these associations aims at the removal of conditions and customs prejudicial to the health of women at the period preceding childbirth. Another aims at getting more efficient preparation made for the care of children whose advent is expected. Another aims at securing as far as possible the efficient nourishment of children during the period of lactational nursing. Much attention was also given to the difficult subject of saving children from the consequences of parental neglect; and in regard to this, frequent reference was made to the beneficial influence of the law of July 1889, introduced by my venerable and revered friend, the Senator Théophile Roussel, which enables the authorities in those districts which have adopted it to remove neglected children from their parents. The providing of fresh-air holidays for city children, as is done in this country by such organisations as the Fortnight Holiday Fund, which in Edinburgh is identified with the name of Mrs. Stirling Boyd, was also discussed. And with reference to the advantages attending the international exchange of ideas in questions of charitable work, I think Mrs. Stirling Boyd could tell us how much we have learned in regard to holiday homes from Pastor Bion, of Zürich.

"In Paris, the last-mentioned work is done partly by the official *Assistance Publique*, and partly by an association originated by Drs. Dubois and Marie, of which Madame Schmahl, a lady known to some of us in Edinburgh, is the President. There was full discussion also of the system of boarding pauper children in rural localities which is largely resorted to in Paris, and in the adoption of which the parishes of Edinburgh and Glasgow and other urban parishes in Scotland have the distinguished honour of having led the way. I shall not detain you any further by examples of the subjects discussed at the Paris Congress, except to mention the admirable system under which the harmless and incurable insane belonging to Paris are boarded out in the departments of Cher and Allier. This great organisation is due to the zeal and ability of my distinguished friend, Dr. Marie, who delights in acknowledging how much, in carrying out his work, he has been indebted to the example of Scotland.

"In this enumeration I have, not being free from the patriotic weakness common among Scotsmen, mentioned two instances in which our own country has taken a leading position. But I should convey a very wrong impression if I led you to believe that I left the Paris Congress with a feeling that we have little to learn from other countries. I think, on the contrary, that it would show a want of intelligence on our part if we failed to learn a great deal from what the great nations of Europe and America have to tell us. Though each nation has its own peculiar social and economic conditions to deal with, most of the problems that have to be solved are, in principle, the same; and much light is thrown upon them by comparing the different ways in which they have been worked out. I hope, therefore, that you will be disposed to give a cordial approval to the holding of the

congress next year. There are many defects in our own arrangements, of which most of us are conscious, and we may find that the best way of removing some of these may be shown by the experience of others elsewhere. If I might indicate one of the ways in which the proposed conference might be useful, I would suggest the contribution of short accounts of the work of philanthropic organisations in which not only their successful work would be described, but also the difficulties which had been found impossible to overcome.

"I should like to say that though the proposed congress is called international, we might find it useful in giving an opportunity of comparing the experiences gained in different places within our own country. An illustration showing where this might be useful is given in the letter in which Mr. Patten MacDougall, the legal member of the Scottish Local Government Board, expresses his regret at not being able to be present with us to-day. He says, 'It is a curious fact that in the debate in the House upon pauper children, two nights ago, no reference was made to our Scottish system and to the marked success which has attended it.' A similar reflection occurred to myself when reading the report of the debate, and I think I may say that those who are acquainted with the working of the system in Scotland would probably have been able to explain the causes of certain defects alleged to be present in the system as practised in England. Some light might be thrown on this subject at the proposed congress.

"I have ventured to give some reasons for my belief that the proposed congress would be useful to ourselves. But even if no such reason had existed, I should still plead for its being held. The wish of the Antwerp Congress to hold it here is no light compliment to Scotland, and we must receive it courteously. Many of us have had cause to be grateful for generous welcomes extended to us in foreign countries, and we must be willing to reciprocate such kindness with equal cordiality. To put the case, however, at its lowest, it would not be worthy of us, as Scotsmen, to refuse to confer with the representatives of foreign countries who sought to discuss with us the ways in which we can best help our necessitous fellow-creatures. I am strongly of opinion also that such gatherings tend to promote kindly international relations."

PROVISIONAL PROGRAMME.

Note.—All written contributions to the work of the Congress should be forwarded as soon as possible to the Secretary of the Section for approval of the Sectional Committee. The titles of such contributions should be sent to the Secretary before March 1st, and the papers themselves on or before April 30th, 1904.

SECTION I.—CHILDREN.

President.—The Right. Hon. the Earl of Mansfield.

Vice-Presidents.—J. B. Fergusson, Esq., of Bagarth; Miss E. S. Haldane, Auchterarder; John MacDonald, Esq., Edinburgh; W. Leslie Mackenzie, Esq., M.A., M.D., Edinburgh; Rev. J. B. Paton, D.D., Nottingham; Miss Flora Stevenson, LL.D., Edinburgh; John Thomson, Esq., M.D., F.R.C.P.E., Edinburgh.

Secretary.—John Jeffrey, Esq., Local Government Board, 125, George Street, Edinburgh.

Subjects.—(1) The Supervision and Home Care of Children and Young Adults who are Mentally Defective (Imbecile, Feeble-minded, and Backward) *conjoint discussion by Sections I and V*. (2) The Boarding-out of Pauper Children. (3) The Methods of Organising Home Relief for Cripples. (4) Prevention of Cruelty to Children. (5) Home Relief in Relation to the Feeding of Infants and of School Children. (6) The Care of Young and Middle-aged Widows and Children who are in Receipt of Out-door Parish Relief.

SECTION II.—OLD AGE.

President.—A. W. Black, Esq., M.P.

Vice-Presidents.—W. A. Brailward, Esq.; W. S. Brown, Esq., City Treasurer, Edinburgh; G. Matheson Cullen, Esq., M.D., Edinburgh; Andrew Ferrier, Esq., Edinburgh; David Paulin, Esq., F.R.S.E., Edinburgh; J. R. Reid, Esq., C.I.E., Edinburgh.

Secretary.—W. B. Wilson, Esq., W.S., 137, George Street, Edinburgh.

Subjects.—(1) Old Age Pensions—the General Question. (2) Old Age Pensions from the Point of View of Friendly Societies. (3) The Danish and German Systems of Relief and their Moral and Economic Effects. (4) The Scottish Practice and Experience of boarding out Aged Paupers.

SECTION III.—ABLE-BODIED ADULTS.

President.—Sir Charles Cameron, Bart., M.D.

Vice-Presidents.—Sir Samuel Chisholm, Bart., Glasgow; Sir Robert Pullar, Perth; Rev. J. L. Brooks, Lingfield; George Dott, Esq., J.P., Glasgow; Lieut.-Col. A. B. M'Hardy, C.B., R.E., Edinburgh; Rev. David Ross, D.D., Glasgow.

Secretaries.—James C. Dunlop, Esq., M.D., F.R.C.P.E., 33, Chester Street, Edinburgh; and James R. Motion, Esq., Parish Council Chambers, 266, George Street, Glasgow.

Subjects.—(1) Labour Colonies. (2) Model Lodging-houses. (3) Compulsory Detention of Paupers. (4) The Evolution of the Criminal and the Means of checking the Supply. (5) Prisoners' Aid Societies. (6) The Care of Habitual Inebriates.

SECTION IV.—SICK ADULTS.

President.—Malcolm Morris, Esq., F.R.C.S.E.

Vice-Presidents.—Professor Calmette, Lille; Professor Landouzy, Paris; Arthur Newsholme, Esq., M.D., F.R.C.P., Brighton; R. W. Philip, Esq., M.A., M.D., F.R.C.P.E., Edinburgh; Mrs. Scharlieb, M.D., London; J. B. Sutherland, Esq., S.S.C., Edinburgh.

Secretaries.—A. Dingwall Fordyce, Esq., M.B., Ch.B., F.R.C.P.E., 15, Melville Street; and W. Leslie Lyall, Esq., M.B., C.M., 8, Murrayfield Gardens, Edinburgh.

Subjects.—(1) The Organisation of the Home Treatment of Pulmonary Tuberculosis. (2) The Relation between Hospital and Home Relief of Sick Poor. (3) The Best Scheme of Home Attendance on Puerperal Women in Large Centres.

SECTION V.—INSANE AND EPILEPTICS.

President.—The Master of Polwarth.

Vice-Presidents.—John Carswell, Esq., L.R.C.P.E., J.P., Glasgow; John Macpherson, Esq., M.D., F.R.C.P.E., Edinburgh; Alex. Robertson, Esq., M.D., Glasgow; J. F. Sutherland, Esq., M.D., F.R.S.E., Edinburgh; A. R. Urquhart, Esq., M.D., F.R.C.P.E., J.P., Perth.

Secretaries.—W. A. Parker, Esq., M.B., C.M., Gartloch, Glasgow; and A. R. Turnbull, Esq., M.B., C.M., Springfield, Cupar-Fife.

Subjects.—(1) The Best Method of administering the System of Family Care of the Insane, and the Best System of Supervision. (2) After-care of Friendless Patients discharged from Asylums. (3) The Supervision and Home Care of Children and Young Adults who are Mentally Defective (Imbecile, Feeble-minded, and Backward) (*conjoint discussion by Sections I and V*). (4) Epileptic Colonies.

Tickets of membership of the Congress, including the right to receive a copy of the printed Report of the Proceedings, may be obtained, price 16s., from Isaac J. Cowie, Secretary and Treasurer to the Congress, 59, Frederick Street, Edinburgh.

Return tickets to Edinburgh will be issued at a single fare and a quarter to Members of Congress at all stations on British railways, on presentation of a voucher signed by the Secretary of the Congress.

THE LIBRARY.

The Committee urge members to examine the Catalogue of the Library, and to send to the Librarian, 11, Chandos Street, any books that they may wish to contribute, and also to suggest books which they would wish to see added to the Library.

Propositions will be brought before the Association, which, if adopted, will make the Library, it is hoped, a valuable aid to the usefulness of the Association.

LIST OF BOOKS RECENTLY PURCHASED FOR LIBRARY.

- Biervliet, J. J. van.—*La Mémoire*.
 Binet, Alfred.—*L'Année Psychologique* (seventh year), 1901.
 Defendorf, A. Ross, M.D.—*Clinical Psychiatry*.
 Dufour, L.—*Manuel de Pharmacie Pratique*.
 Duprat, G. L.—*La Morale*.
 Edinger, Prof. Dr. L.—*Hirnanatomie und Psychologie*.
 Fleury, Dr. Maurice de.—*Les Grande Symptômes Neurasthéniques*.
 Fursac, J. Rogues de.—*Manuel de Psychiatrie*.
 Hutchinson, Woods.—*Studies in Human and Comparative Pathology*. Edited by Dr. Ed. Blake.
 Kraepelin, Emil.—*Einführung in die Psychiatrische Klinik*.
 Marro, Antoine.—*La Puberté*.
 Mott, F. W.—*Archives of Neurology*, vols. i and ii.
 Näcke, Dr. P.—*Über die Sogenannte (Moral Insanity)*.
 Nicolaysen, Lyder.—*Norsk Mag. for Lægevidenskaben*, No. 2, 1899.
 Nonne, Dr. Max.—*Syphilis und Nervensystem*.
 Pâulhan, Fr.—*La Volonté*.
 Pilcz, Dr. Alexander.—*Die periodischen Geistesstörungen*.
 Sergi, G.—*Les Émotions*.
 Sollier, Dr. Paul.—*Psychologie de l'Idiot et de l'Imbecile; L'Hystérie et son Traitement*.
 Tourette, Gilles de la.—*Le Traitement Pratique de l'Épilepsie*.
 Vaschide, N., et Cl. Vurpas.—*Psychologie du Délire*.
 Weber, Dr. L. W.—*Beit. sur Pathogenese und path. Anatomie der Epilepsie*.

NOTICES BY THE REGISTRAR.

The next examination for the Certificate in Mental Nursing will take place on Monday, May 2nd, 1904.

The next examination for the Certificate in Psychological Medicine will be held in July, 1904.

The examination for the Gaskell Prize will take place at Bethlem Hospital, London, in the same month.

Notices of the above have appeared in the medical papers.

For further information respecting the various examinations of the Association apply to the Registrar, Dr. Alfred Miller, Warwick County Asylum, Hatton, near Warwick.

NOTICES OF MEETINGS.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

Quarterly Meeting.—The next Quarterly Meeting will be held at 11, Chandos Street, London, W., on Wednesday, 18th May, 1904.

Annual Meeting.—The Annual Meeting will be held under the presidency of Dr. R. Percy Smith, at 11, Chandos Street, London, W., on 21st and 22nd July, 1904.

South-Western Division.—The Spring Meeting will be held, by the courtesy of Dr. Brayn, at Broadmoor Asylum on Tuesday, 26th April, 1904.

South-Eastern Division.—The Spring Meeting will be held, by the courtesy of Dr. Hunter, at the West Ham Borough Asylum on Friday, 29th April, 1904.

APPOINTMENTS.

Campbell, R. B., M.B., C.M.Edin., Medical Superintendent of the Inverness District Asylum.

Hood, A. J., M.B., Ch.M.Glas., Visiting Medical Officer to the New South Wales Lunatic Asylum.

Law, Charles D., L.R.C.P., L.R.C.S.Ed., Senior Assistant Medical Officer, Crichton Royal Institution, Dumfries.

McDouall, H. C., M.R.C.S.Eng., L.R.C.P.Lond., Acting Medical Superintendent at the Hospital for Insane, Collan Park, Sydney.

Montgomery, S. H. R., M.B., B.S., R.U.I., Inspector-General of the Insane, Western Australia.

Stewart, R. S., M.D.Glas., C.M., Medical Superintendent of the Glamorgan County Asylum, Bridgend.

Watson, J. F., M.B., M.Ch.Melb., Assistant Medical Superintendent to Hospital for the Insane, Toowoomba, Queensland.

MEMORANDUM OF ASSOCIATION
OF THE
MEDICO-PSYCHOLOGICAL ASSOCIATION
OF GREAT BRITAIN AND IRELAND.

(Registered 30th July, 1895.)

I.—The name of the Association is “The Medico-Psychological Association of Great Britain and Ireland.”

II.—The registered Office of the Association will be situate in England.

III.—The objects for which the Association is established are the promotion and cultivation of science in relation to mental disorder, the improvement of the treatment of the insane, the promotion of good-fellowship amongst the Members of the Association, and the maintenance of the honour and the interests of the Members of the Association and of the medical profession generally in its relation to mental disorder, and allied objects, by the aid of all or any of the following, *videlicet* :

- (a) The taking over of the whole of the assets and liabilities of the unincorporated Association known as The Medico-Psychological Association of Great Britain and Ireland, established in 1841, which may lawfully be transferred to the Association.

- (b) Periodical or other meetings of the Members of the Association and conferences with other Associations whether in the United Kingdom or elsewhere.
- (c) The publication of such information as may be thought desirable in the form of a periodical Journal which shall be the Journal of the Association or otherwise.
- (d) The printing, publishing, translating, selling, lending, and distributing of any books, pamphlets, or treatises on or connected with science in relation to mental disorder, or with the treatment of the insane, or with allied sciences, and the causing translations into any language to be made of any such books, pamphlets, or treatises, and the printing, publishing, selling, lending, and distributing the same in the United Kingdom or elsewhere.
- (e) The making of any expenditure the Association may think fit for sending and maintaining in any part of the United Kingdom or elsewhere any person or persons chosen by the Association for the investigation of science in relation to mental disorder, or of the treatment of the insane, or of allied subjects, the convening of meetings and inviting thereto any person or persons desired by the Association, for discussing and promoting the objects of the Association, and the sending and defraying the expenses of representatives of the Association to any meetings convened for similar objects in any part of the United Kingdom or elsewhere, and for making experiments and observations on subjects connected with insanity.
- (f) The consideration of all questions affecting the interests of the Association and of the medical profession generally in its relation to mental disorder, the treatment of the insane and allied subjects, the petitioning of Parliament, or the promotion of deputations in regard to measures affecting the objects for which the Association is established, and the promotion of

improvements in the principles or administration of the law relating to mental disorder, the treatment of the insane, and allied subjects.

- (g) The grants of sums of money out of the funds of the Association for the promotion of the objects of the Association in such manner as may be from time to time determined on.
- (h) The promotion and encouragement of the study of science in relation to mental disorder, of the scientific treatment of the insane, and of allied subjects:—
 - (1) by the provision, institution, and maintenance of lectures, classes, examinations, and other means of instruction therein upon such terms and conditions, and upon payment of such fees as the Association may from time to time determine by regulations or otherwise; provided always that the surplus of such payments over the expenditure necessary for the provision, institution, and maintenance of such means of instruction shall be devoted to such of the objects of the Association as may be deemed expedient; and
 - (2) by the institution, maintenance, and grant of scholarships, prizes, certificates, or other awards or distinctions, on such terms and conditions as may from time to time be prescribed by regulations or otherwise.
- (i) The amalgamation or entry into Partnership or any joint purse arrangement with any Association in the United Kingdom, established for purposes similar to and under restrictions as to the application of income and property identical with those for and under which this Association is established.
- (j) The establishment or promotion of branches or local divisions of the Association, whether in the United Kingdom or elsewhere.
- (k) The provision, if the Association think fit, of legal assistance to Members of the Association in enforcing or defending their legal rights, whether under the

Lunacy Acts or otherwise, if and so far as such assistance may be lawfully afforded, having regard to the laws against maintenance.

- (l) Subject to the provisions of the 21st Section of the Companies Act of 1862, the acquisition by purchase, taking on lease, or otherwise, of lands and buildings, and of all other property real or personal which the Association for the purposes thereof may, from time to time, think proper to acquire, and which may lawfully be held by them, the reselling, underleasing, subletting, surrendering, turning to account or disposing of any such property, or any part thereof, the erection upon any such land of any building for the purposes of the Association, and the alteration of or addition to any building erected upon any such land.
- (m) The borrowing and raising of money for the purposes of the Association and the securing of the repayment thereof by bonds, debentures, mortgages, or other securities, or in such other manner as may be determined, and for this purpose the mortgaging or charging of all or any of the property of the Association.
- (n) The doing of all such other lawful things as are incidental or conducive to the attainment of the above objects. And that in case the Association shall take or hold any property subject to the jurisdiction of the Charity Commissioners for England and Wales, the Association shall not sell, mortgage, charge or lease such property without such consent as may be required by law ; and as regards any such property, the Managers or Trustees of the Association shall be chargeable for such property as may come into their hands, and shall be answerable and accountable for their own acts, receipts, neglects and defaults, and for the due administration of such property in the same manner and to the same extent as they would, as such Managers or Trustees, have been if no incorporation had been effected, and the incorporation of the Association shall not diminish or impair any

control or authority exercisable by the Chancery Division or the Charity Commissioners over such Managers or Trustees; but they shall, as regards any such property, be subject jointly and separately to such control and authority as if the Association were not incorporated.

IV.—The income and property of the Association, whence-soever derived, shall be applied solely towards the promotion of the objects of the Association as set forth in this Memorandum of Association, and no portion thereof shall be paid or transferred directly or indirectly by way of dividend, bonus, or otherwise howsoever by way of profit to the Members of the Association, provided that nothing herein shall prevent the payment in good faith of remuneration to any officers or servants of the Association or to any Member thereof or other person in return for any services actually rendered to the Association, or the payment of interest at any rate not exceeding five per cent. per annum on money borrowed from any Member of the Association, or be deemed to exclude any Member of the Association from the benefit of any grant made in furtherance of the objects of the Association.

V.—The fourth paragraph of this Memorandum is a condition on which a licence is granted by the Board of Trade to the Association in pursuance of Section 23 of the Companies Act, 1867.

VI.—If any Member of the Association pays or receives any dividend, bonus, or other profit in contravention of the terms of the 4th paragraph of this Memorandum his liability shall be unlimited.

VII.—Every Member of the Association undertakes to contribute to the assets of the Association in the event of the same being wound up during the time that he is a Member, or within one year afterwards for payment of the debts and liabilities of the Association contracted before the time at which he ceases to be a Member, and of the costs, charges, and expenses of winding up the same, and for the adjustment of the rights of the contributories amongst themselves, such

amount as may be required, not exceeding one guinea, or in case of his liability becoming unlimited, such other amount as may be required in pursuance of the last preceding paragraph of this Memorandum.

VIII.—If upon the winding up or dissolution of the Association there remains, after the satisfaction of all its debts and liabilities, any property whatsoever, the same shall not be paid to or distributed among the Members of the Association, but shall be given or transferred to some other Institution or Institutions having objects similar to the objects of the Association, to be determined by the Members of the Association, at or before the time of dissolution, or in default thereof by such Judge of the High Court of Justice as may have or acquire jurisdiction in the matter.

IX.—True accounts shall be kept of the sums of money received and expended by the Association, and the matter in respect of which such receipt and expenditure takes place, and of the property, credits and liabilities of the Association; and, subject to any reasonable restrictions as to the time and manner of inspecting the same that may be imposed, in accordance with the regulations of the Association for the time being, shall be open to the inspection of the Members. Once, at least, in every year the accounts of the Association shall be examined, and the correctness of the balance-sheet ascertained by one or more properly qualified Auditor or Auditors.

We, the several persons whose names and addresses are subscribed, are desirous of being formed into an Association in pursuance of this Memorandum of Association.

Names, Addresses, and Descriptions of Subscribers.

- DAVID NICHOLSON,
Broadmoor Asylum,
Wokingham, Berks,
Doctor of Medicine.
- HENRY RAYNER,
Upper Terrace House,
Hampstead, Middlesex,
Doctor of Medicine.
- HERBERT FRANCIS HAYES NEWINGTON,
The Gables, Ticehurst, Sussex,
Member of the Royal College of Physicians,
Edinburgh.
- CONOLLY NORMAN,
Richmond District Lunatic Asylum,
Dublin,
Fellow of the Royal College of Physicians,
Ireland.
- DAVID YELLOWLEES,
Gartnavel, Glasgow,
Doctor of Medicine.
- THOMAS SMITH CLOUSTON,
Royal Asylum,
Edinburgh,
Doctor of Medicine.
- GEORGE FIELDING BLANDFORD,
48, Wimpole Street,
London,
Doctor of Medicine.
- FLETCHER BEACH,
64, Welbeck Street,
London,
Bachelor of Medicine.

Dated this twenty-sixth day of July, One thousand eight hundred and ninety-five.

Witness to the above signatures,

CHARLES WIGAN,
3, Lincoln's Inn Fields, London,
Solicitor.

ARTICLES OF ASSOCIATION
OF THE
MEDICO-PSYCHOLOGICAL ASSOCIATION
OF GREAT BRITAIN AND IRELAND.

*(Adopted by Special Resolution passed and confirmed at Meetings held
respectively on the 18th day of November, and the 17th day of
December, 1903.)*

Preliminary.

1. For the purpose of Registration the number of the Members of the Association is declared not to exceed 700.

2. In these Articles, unless the context or subject requires a different meaning—

“The Association” shall mean the above-named Medico-Psychological Association of Great Britain and Ireland.

“The Bye-laws” shall mean the Bye-laws passed by the General Meeting of the Association in manner hereinafter authorised, and for the time being in force and unrepealed.

Subject to the above definitions these Articles shall be construed with reference to the provisions of the Companies Acts 1862 to 1900, and the terms used in these Articles shall be taken as having the same respective meanings as they have when used in those Acts.

3. The Association is established for the purposes expressed in the Memorandum of Association.

Members.

4. The following persons and no others shall be registered as Members of the Association, *viz.* :

(a) The persons whose names were on the Register of Members of the Association on the 18th day of November 1903, and

(b) Such other persons as shall be elected Members of the Association in accordance with the Bye-laws.

5. Members shall consist of (a) Ordinary Members and (b) Members of such other class or classes (if any) as shall be provided for by the Bye-laws. The persons registered as Ordinary Members of the Association on the said 18th day of November, 1903, shall be registered as Ordinary Members under these Articles.

6. A Member, upon giving notice in writing to the Association by letter addressed to the Registered Office of the Association expressing his desire to withdraw from the Association, may, upon payment of all or any sums due and owing from him as such Member to the Association, withdraw from the Association, and thereupon the name of such person shall be removed from the Register of Members.

7. A Member may be excluded from the Association and his or her name removed from the Register of Members in manner provided for by the Bye-laws.

Register.

8. A Register shall be kept in one or more books (1) of the Ordinary Members of the Association and (2) of the Members of the Association of other classes (if any), and there shall be entered therein the following particulars :

(a) The names and addresses and the occupation (if any) of the Members of the Association, (b) the date at which the name of any person was entered in the Register as a Member, and (c) the date at which any person ceased to be a Member.

Officers.

9. The Officers of the Association shall be a President, a Treasurer, a Secretary, and such other Officers as are provided for by the Bye-laws, and the rights, privileges, and duties of such Officers respectively shall be as provided for by the Bye-laws.

The Council

10. The affairs of the Association¹ shall, subject to these Articles and Bye-laws, be managed by a Council, to be constituted as provided for in the Bye-laws.

General Meetings.

11. Not less than fourteen days before any General Meeting the Secretary shall send through the post to each Ordinary Member of the Association notice of such Meeting by prepaid letter addressed to such Member at his registered place of abode, or otherwise as provided in the Bye-laws.

12. The Quorum for a General Meeting shall be ten Ordinary Members present in person, or such other number of Ordinary Members as may be provided for by the Bye-laws.

13. Ordinary Members of the Association present in person, and the Chairman of the Meeting, shall alone be entitled to vote at any General Meeting of the Association, and at any such Meeting each Ordinary Member shall be entitled to one vote, and the Chairman to one vote and also, in case the voting is equal, to a second or casting vote.

14. At any General Meeting the President, if present, shall be Chairman, and in the absence of the President the Ordinary Members of the Association present in person shall elect a Chairman.

15. Subject to any provisions in the Bye-laws, the voting at any General Meeting shall be taken by a show of hands, the hands being counted by the Chairman and the Secretary, and if the Chairman and Secretary do not agree as to the numbers, then by the taking of a division in such manner as the Chairman shall decide.

Bye-laws.

16. At any General Meeting of the Association Bye-laws may be made, varied, or repealed, subject to the following Regulation, *viz.*:—Not less than fourteen days before such Meeting the Secretary shall send through the post to each Ordinary Member of the Association by prepaid letter addressed

to such Member at his registered address, or otherwise as provided by the Bye-laws notice of the hour and place of Meeting, and notice of the Resolution to be proposed at the Meeting for such making, varying, or repeal as aforesaid, provided that the omission to send any such notice shall not invalidate anything done at such Meeting.

17. The Bye-laws may deal with the management and administration of the Association, the rights and obligations of Members, and all matters affecting the business of the Association and the mode of carrying on the same, and in particular may make provision for the following matters :

- (a) The qualification of Membership of the Association.
- (b) The election of Members.
- (c) The payments to be made by Members.
- (d) The withdrawal and expulsion of Members.
- (e) The division of Members into various classes, and the rights, privileges, duties of Members of such respective classes.
- (f) The establishment and regulation of local centres or divisions of the Association.
- (g) The Officers of the Association and their respective rights, privileges, and duties.
- (h) The keeping of the Accounts of the Association and the Audit of the same.
- (i) The Council of the Association and its constitution, its powers, duties, and procedure.
- (j) The establishment of and regulation of Committees of the Association.
- (k) The holding of Annual, General, and other Meetings of the Association, and the regulations for transacting business thereat.
- (l) The sending of Notices.

Subject to the provisions of the Statutes and to these Articles, such Bye-laws shall be binding on the Association and on all Members of the Association.

BYE-LAWS
OF THE
MEDICO-PSYCHOLOGICAL ASSOCIATION
OF GREAT BRITAIN AND IRELAND.

Classes of Members.

1. The Association shall consist of three classes: (*a*) Ordinary Members, (*b*) Honorary Members, and (*c*) Corresponding Members.

Qualification and Election of Ordinary Members.

2. Medical Practitioners who are registered in the United Kingdom under the Medical Acts; Medical Practitioners who reside in any part of the British Empire and are so registered; and Medical Practitioners who hold such medical qualifications as satisfy the Council shall be qualified for election as Ordinary Members.

3. (*a*) Every Candidate for admission to the Association as an Ordinary Member shall be proposed or recommended by three Members, of whom one at least shall be personally acquainted with him.

(*b*) The proposers of such Candidate shall send to the General Secretary, or the Secretary of the Division in which the Candidate resides, a proposal in writing, setting forth the full Christian name and surname of the Candidate, with address, qualifications, and appointments, if any.

(*c*) A list of such Candidates who have been duly proposed since the last Meeting shall accompany the circular convening such Annual, Quarterly, or Divisional Meeting, and no

Candidate shall be submitted for election whose name does not appear on such list.

4. The election of Ordinary Members shall take place at the Annual, Quarterly, and Divisional Meetings, and shall be by ballot, and no such Candidate shall be declared elected unless he shall have in his favour three fourths of the total number of Members balloting. Such Candidates may be voted for as a whole, but in the event of a single black ball each shall be separately voted for until a Candidate is reached for whom a black ball is cast, after which the remaining Candidates shall be voted for as a whole, and the election shall proceed as before.

5. A list of all Ordinary Members elected at Divisional Meetings shall be forthwith forwarded by the Secretary for the Division in which such Meeting is held to the General Secretary; and such list shall contain the full name, address, and qualification of each such Member elected.

6. Every person elected an Ordinary Member shall forthwith receive notice of the fact in writing from the General Secretary, but no election of an Ordinary Member shall be considered complete until the person elected has paid his subscription and signed, either in the books of the Association or by means of a copy transmitted to him by the General Secretary, the following obligation :—" I hereby promise that I will promote the objects of the Medico-Psychological Association of Great Britain and Ireland to the best of my ability, and I admit that I am bound by its Memorandum and Articles and Bye-laws and Regulations for the time being in force."

7. The election or re-election of every person as an Ordinary Member shall be entered on the Minutes of the Meeting and recorded by the General Secretary in the Register of Members; but if it should appear upon a ballot that any person proposed is not elected, no notice of the decision arrived at shall be taken in the Minutes.

Qualification and Election of Honorary Members.

8. Distinguished members of the medical profession and others who are eminent in psychology or in those branches of science that are connected with the service of insanity, or who have rendered signal service to the cause of humanity in

relation to the treatment of the insane, or to the Association, shall be qualified for election as Honorary Members.

9. The number of Honorary Members elected annually shall not exceed three, and the total number shall not exceed forty.

10. The election of Honorary Members shall be conducted in the same manner as that provided by Bye-laws 3 and 4 and for the case of Ordinary Members, with the exception that (a) they shall be elected only at Annual Meetings, (b) they shall be recommended by six Members (personal acquaintance not being requisite), (c) they shall be approved by the Nominations Committee and the Council. The names of Candidates shall be printed, with the names of Members recommending them, on the Agenda of the Annual Meeting at which they will be proposed for election.

11. As soon as convenient after their election, Honorary Members shall be presented with a diploma in the form A appended to these Articles, and signed by the President, General Secretary, and at least four Members of the Council.

Qualification and Election of Corresponding Members.

12. Foreign and Colonial physicians residing abroad may be elected Corresponding Members, but the number of such Members shall never exceed thirty at one time.

13. Corresponding Members shall be elected in the same manner as Honorary Members, but their recommendation shall require the signatures of only four Ordinary Members.

14. Corresponding Members shall as soon as may be after their election receive a diploma in the form B appended to these Bye-laws, and signed by the President, General Secretary, and at least four Members of the Council.

Withdrawal and Expulsion of Members.

15. Any Member of the Association may withdraw from it on signifying his desire to do so by letter under his hand addressed to the General Secretary, but such resignation shall not in the case of an Ordinary Member take effect until his subscription is paid up to the end of the year then current.

16. Any Member whose name has been removed from the

Medical Register shall *ipso facto* cease to be a Member of the Association.

17. Any Ordinary Member who shall in respect of two successive years omit, after a special application of the Treasurer, to pay his annual subscription, shall be reported by the Treasurer to the Council, who may give directions for the removal of the name of the defaulting Member from the roll of the Association, or may take such action with regard to him as it decides upon.

18. Whenever there shall appear cause in the judgment of the Council for the expulsion of any Member from the Association, a minute shall be made thereof, and a copy of such minute sent forthwith in a registered letter by the General Secretary to the Member in question, who shall be invited to attend the next Meeting of the Council. If, after further consideration at their next Meeting, the Council still regard the expulsion of the Member as advisable, they shall frame a resolution to that effect, which shall be submitted to the next Annual Meeting and decided by ballot, a majority of three fourths of the Members voting being required to carry the resolution.

Payments by and Privileges of Members.

19. The annual subscription of each Ordinary Member shall be one guinea, or such larger sum, not exceeding one guinea and a half, as may be determined by the Annual Meeting. Subscriptions for each year become payable on the 1st January in that year. Ordinary Members elected after the 1st July shall pay a subscription of half a guinea only for the year of their election.

20. Honorary Members shall be exempt from all payments to the Association excepting the liability to the guarantee of one guinea contained in the Memorandum, and shall enjoy all the privileges of Ordinary Members except that of voting.

21. Corresponding Members shall be exempt from all payments to the Association excepting the liability to the guarantee of one guinea contained in the Memorandum, and shall enjoy the privilege of attending the Meetings of the Association and of introducing friends to them in the same manner as Ordinary Members, but shall not be entitled to any further privileges without special leave granted by the Association.

Divisions.

22. There shall be Divisions of the Association for the cultivation of science in relation to mental disorder, the improvement of the treatment of the insane, and the promotion of good-fellowship among its Members.

23. Upon the application of a sufficient number of Members the Association, on the recommendation of the Council, may constitute a new Division of the Association in any locality of the United Kingdom or in the Dependencies or the Colonies thereof.

24. No Division shall have the power to speak or act in the name of the Association, or to commit the Association to any engagement.

25. Each Division shall have power to hold meetings, to choose its own Chairman, to appoint its own Secretary, to elect Members of the Association, and to conduct its own business. Each Division shall annually elect Members to act as representatives of the Division on the Council.

26. The appointments of the Divisional Secretaries and the election of Representative Members shall proceed upon voting papers issued to Members of Divisions at the same time as the Agenda papers for the Divisional Meeting at which such appointment or election is to take place. These voting papers shall be in Form E appended to these Bye-laws and shall show the names of those proposed for election, together with the names of six Members of the Division recommending each; but no recommendation of any Member shall be made until his consent to serve shall have been obtained. Any ordinary Member of the Division may vote by deleting the name or names of any or all the proposed members and by substituting the name or names of any other Member of the Division whose consent to serve has been received. In such case it shall not be necessary for such last mentioned member to have been recommended by six members of the Division as aforesaid. Voting papers must be handed in at the Meeting at which election takes place, or must be sent by post to the Divisional Secretary so as to reach him seven clear days before the said Meeting. The voting papers shall be subjected to the scrutiny of the said Meeting, and the results of election shall be declared and reported by the Divisional Secretary to the General Secretary in time for that Meeting of Council which is held at least

two months before the Annual Meeting of the Association. In the event of equality of votes the Divisional Meeting shall decide any question thus raised.

27. The dates of the Divisional Meetings of the Association for each year shall be fixed at the Annual Meeting as provided by Bye-law 87. All Members of the Association shall have a right to attend any of the Divisional Meetings and take part in all business of the Meetings, save such as refers to the internal management of the Division.

28. The expenditure of each Division shall be subject to the control of the Council, and no expenses shall be incurred by a Division without the consent of the Council, except those necessary for convening and holding its Meetings, and for election of Representatives and Secretary.

29. A Divisional Meeting may transmit through its Secretary a Resolution to the General Secretary with a demand that such Resolution be discussed at the next Annual Meeting ; but such Resolution must be sent to the General Secretary in time to be placed on the Agenda of the Annual Meeting.

30. The Association may, at an Annual Meeting, on the recommendation of the Council, dissolve a local Division, provided that a notice to dissolve such Division be placed on the Agenda of the business to be considered at the Meeting.

Officers.

31. The Officers of the Association shall consist of a President, President-elect, ex-President, Treasurer, General Secretary, Divisional Secretaries, Secretary to the Educational Committee, Registrar, and Editor or Editors of the JOURNAL, all of whom shall hold office for one year from the date of their election, unless otherwise directed by these Bye-laws.

32. The Officers, with the exception of the Secretary to the Educational Committee and the Divisional Secretaries, shall be nominated in manner provided by Bye-law 74, shall be elected in manner provided by Bye-law 67, and shall assume office on the taking of the chair by the President for the ensuing year.

The President.

33. The President for the ensuing year shall enter on his duties after the private business of the Annual Meeting has

been disposed of or adjourned, and shall then deliver his inaugural address. He shall preside at all Meetings at which he is present, of the Association, of its Divisions, and of the Council.

34. He shall have the same right of voting as an Ordinary Member, and in the case of an equality of votes shall have a second or casting vote.

35. He shall regulate the proceedings of the Annual and other Meetings in accordance with the Articles and these Bye-laws, and shall maintain order.

The Treasurer.

36. The Treasurer shall receive for the use of the Association all sums of money due to it, and shall pay and disburse all sums of money that may be due by the Association, and shall see that every payment exceeding £5 in amount is authorised in writing by the President and either an Editor, General Secretary, Registrar, or Chairman of Committee in whose department or in whose Committee respectively the liability for such payment has been incurred, and report in writing to the Council at its Meetings.

37. All moneys received for the use of the Association shall be paid into a separate banking account in the name of the Association.

38. The Treasurer shall keep accurate accounts of all his receipts and payments on behalf of the Association, and shall present a report at each Annual Meeting, together with the Revenue Accounts and Balance-sheet for the year last ending before such Annual Meeting.

39. He shall engage the services of a professional accountant to assist him in the preparation of the accounts.

40. He shall invest in securities in which Trustees are for the time being by law authorised to invest, in his own name and those of the Trustees appointed by the Council in accordance with Bye-law 72, such sums of money as the Council may from time to time direct.

41. He shall intimate to each Ordinary Member of the Association at the proper time that his annual subscription is due, and on receipt of the same shall transmit to such Member a printed and numbered check receipt signed by him, on the

counterfoil of which in the book from which all such receipts must be taken he shall enter the name of the Member and the date of payment.

42. He shall make a second demand for the payment of annual subscriptions at the end of three months after the time at which they may have become due, of such Members as shall then have neglected to pay them, and he shall report to the Council, as required by Bye-law 17, the names of all Members who have failed to discharge their obligations to the Association.

The Auditors.

43. Two Auditors shall be appointed annually by the Association in Annual Meeting, on the recommendation of the Nominations Committee and the Council. These Auditors shall not be chosen from the Council, but from the unofficial Members of the Association.

44. The accounts of the Treasurer shall be balanced yearly, and shall be examined by the Auditors at such times as they may appoint; and a short time preceding the Annual Meeting a report shall be prepared by them showing the financial position of the Association and the balance in the Treasurer's hands, and making such suggestions as may seem expedient.

45. The Report of the Auditors shall be printed and presented to the Annual Meeting of the Association, and shall be published in the next ensuing number of the JOURNAL.

The General Secretary.

46. The General Secretary shall carry on the correspondence of the Association, summon Annual, Quarterly, and Special Meetings when due, or when called upon by competent authority to do so, prepare reports (for which he may obtain the services of a reporter) of all such Meetings for publication in the JOURNAL, enter in proper books minutes of all such Meetings, summon Meetings of the Council as required in these Bye-laws, and enter in proper books minutes of Council Meetings, keep a Register of Members and send a copy thereof annually to the Editors, send to the Editors for publication in the JOURNAL the yearly official lists of the Association, and perform such other duties as are required by the Articles or by

these Bye-laws and other the regulations for the time being in force.

47. The General Secretary shall inform Ordinary, Honorary, and Corresponding Members of their election, and shall be responsible for their names being enrolled in the Register of Members.

Divisional Secretaries.

48. The Divisional Secretaries shall from time to time convene Meetings of their respective Divisions in accordance with Bye-law 27, shall send notices of such Meetings to the Editors of the JOURNAL, shall keep minutes of the Meetings and shall report forthwith to the General Secretary the names, addresses, and qualifications of all Members elected at Meetings of their respective Divisions.

49. The Secretary of each Division shall report to the Council at the last Meeting of the Council held at least two months before each Annual Meeting—

- (a) The number of Members belonging to his Division.
- (b) The number of Meetings held by the Division since the last report.
- (c) The number of Members present at each such Meeting.
- (d) The expenses which have been incurred in connection with such Meetings.
- (e) The names of the Secretary and of Representative Members of Council elected by the Division.

The Editors.

50. The JOURNAL of the Association, under the designation of the *Journal of Mental Science*, shall be published quarterly or at such times as shall be determined by the Council, and shall be conducted by an Editor or Editors.

51. The Editors shall be responsible for the management of the JOURNAL and for such of its contents as are not signed with the names of the writers.

52. The JOURNAL shall be forwarded to every Ordinary and Honorary Member free of charge. On payment of the full subscription for the year the former shall be entitled to a complete set of the numbers of the JOURNAL for that year.

53. After the payment of the ordinary working expenses of the year of the Association, including the publication of the JOURNAL, the surplus funds in the hands of the Treasurer may be appropriated in special aid of the JOURNAL in such amounts as the Council may from time to time determine.

54. Any Member objecting to the decision of the Editor or Editors, or to the manner in which the JOURNAL is conducted, or feeling aggrieved by any comments in the JOURNAL, may appeal to the Annual Meeting; but before doing so he shall submit to the Council any objection or complaint he may desire to make.

55. The Editors shall insert in each number of the JOURNAL the date and place of the next Meeting of the Association. A complete list of the Trustees, Officers, and Honorary, Corresponding, and Ordinary Members of the Association shall be printed annually in the number of the JOURNAL published next after the Annual Meeting.

56. Any Member who has spoken at an Annual, Special, Quarterly, or Divisional Meeting shall be entitled on application to the Editors to a draft of his speech for correction, provided no delay occurs thereby in the issue of the JOURNAL. All papers read at the Annual, Quarterly, or Divisional Meetings of the Association shall be the property of the Association, unless the author shall have previously obtained the written consent of the President, after consultation with the Editors, to the contrary.

The Registrar.

57. The Registrar shall have the management of the business and arrangements of, and shall carry on all correspondence in connection with the Certificates in Psychological Medicine, the Gaskell Prize, the Prize Dissertation, the Certificates of Proficiency in Nursing and attending on the Insane, and other Examinations held under the authority of the Association.

58. As soon as possible after each Examination he shall send a list of the successful candidates to the Editors for publication.

59. He shall keep a Register containing the names of all those who have received Certificates in Psychological Medicine and Prizes, and record the dates on which such Certificates and Prizes were awarded.

60. He shall keep a Register containing the names of all

those who have received Certificates of Proficiency in Nursing and attending on the Insane.

61. He shall report to the Educational Committee, and thereafter to the Council without unnecessary delay, any complaints which may be brought to his notice respecting the holders of the Nursing Certificates of the Association, and shall, if instructed to do so by a minute of the Council, remove the name of any holder from the Register, at the same time placing on record therein the reason for doing so.

The Council.

62. The affairs of the Association shall, subject to the Articles and Bye-laws, be managed by a Council consisting of the Officers, who shall be *ex-officio* members thereof, and non-official members of the Association.

63. The non-official Members of the Council shall be of two classes: (1) Representative Members of Council and (2) Nominated Members of Council.

64. The Representative Members of Council shall be elected annually by the Divisions, subject to the following regulations :

(a) Each Division having a membership of less than 150 shall elect two Representative Members of Council.

(b) Each Division having a membership of 150 or more shall elect one Representative Member of Council for each complete 50 of its membership.

(c) Of the Representative Members of Council elected by any Division having a membership of 200 or more, one at least shall be an Assistant Medical Officer.

(d) The election shall be carried out in manner provided by Bye-law 26.

65. The Nominated Members of Council shall be elected at each Annual Meeting, subject to the following regulations :

(a) One Nominated Member of Council shall be elected for every two Representative Members of Council elected under Bye-law 64.

(b) Such additional Nominated Members of Council shall be elected as shall bring up the number of the non-official Members of the Council to eighteen.

(c) Of the Nominated Members of Council such number

shall be Assistant Medical Officers as shall bring up the number of Assistant Medical Officers elected to be non-official Members of the Council to four.

66. No non-official Member of the Council shall be eligible to hold office for more than three successive years, but he may be re-elected at the Annual Meeting after that at which he retires, or at any succeeding Annual Meeting, except as provided by Bye-law 68.

67. The election of the Officers of the Association and of the Nominated Members of Council shall be carried out in the following manner :

(a) The General Secretary shall send to each Member of the Association with the circular convening the Annual Meeting a list in the Form C appended to these Bye-laws, of all the Officers and Members of the Council for the year about to expire, against the names of each of whom shall be placed the number of all his attendances at the Council Meetings for the past two years, in such manner as to show the number of possible and actual attendances.

(b) The General Secretary shall at the same time send to each Ordinary Member a voting paper in the Form D appended to these Bye-laws, showing the offices vacant, the number of vacancies then impending for Nominated Members of the Council, and the nominations made thereto by the Council under Bye-law 74. The names of a sufficient number of Members who have consented to serve to fill the vacancies on the Council shall be placed on the voting paper by the Council, such list to be furnished to all ordinary Members one month before the Annual Meeting, so that any ordinary Member may have power to vote for the election of Officers of the Association and nominated Members of the Council by deleting the name or names of any or all of the proposed Members, and substituting the name or names of any other Member or Members of the Association whose consent to serve has been received.

(c) Voting papers must be handed in at the Annual Meeting, or sent by post to the General Secretary so as to reach him at least seven clear days before the Annual Meeting. Such papers must be legibly marked on the outside "Voting Paper," and shall be opened by the Scrutineers only at the Annual Meeting. For the election of Officers only the votes of Members present at the Meeting shall be counted.

(d) The President shall appoint from the Members present at the Annual Meeting four or more Scrutineers, who shall count the votes and report the result to him.

(e) The President shall declare those Members elected who have received the largest number of votes, and in the event of an equality of votes shall declare that Member elected who has belonged to the Association for the longest time. Provided, nevertheless, that for the purpose of obtaining the requisite number of Assistant Medical Officers in accordance with Bye-law 65 (c) (but not further or otherwise), a candidate who is such an officer shall be declared elected in preference to another candidate not so qualified, although the latter may have received an equal or larger number of votes.

68. In the event of a vacancy in the Council occurring between the time of the Annual Meetings, the Council may co-opt a Member to fill the vacancy until the next Annual Meeting, except in the case of a Representative Member of Council, in which case the Division may elect a Member to fill the vacancy until the next Annual Meeting; and such temporary co-option or election shall not disqualify, as under Bye-law 66, such Member from being immediately re-elected.

69. The Council shall meet not less than four times a year, at such times as shall be fixed at the Annual Meeting, and at such places as the President shall appoint. Six shall form a quorum.

70. The Secretary shall send an Agenda paper to each Member of the Council before each Meeting of the Council.

71. On the nomination of the Educational Committee the Council shall appoint six Examiners for the Certificate of Psychiatry—two for England, two for Scotland, and two for Ireland. The Senior Examiner for each division of the kingdom shall retire annually. The Council shall similarly appoint three Examiners for the Nursing Certificate, the senior of whom shall retire annually.

72. The Council shall appoint from time to time two Members of the Association as Trustees to act with the Treasurer as directed by Bye-law 40.

73. At least two months before each such Meeting the President or Council shall determine the place at which each Annual and Quarterly Meeting shall be held.

74. The Council shall prepare a report upon the general

state and proceeding of the Association each year, and shall submit the same to the Annual Meeting. Not less than two months before each Annual Meeting the Council shall consider the recommendations of the Nominations Committee and nominate Members for election at the Annual Meeting as officers, and Nominated Members of Council for the ensuing year.

Committees.

75. Committees of the Association shall be of two kinds—

- (a) Standing.
- (b) Special.

76. Standing Committees shall be appointed by the Association at an Annual Meeting, and shall continue in office subject to any alteration in their constitution by an Annual Meeting. They shall report to the Annual Meetings, and may report to a Quarterly Meeting. The Standing Committees shall be—

- (a) Parliamentary.
- (b) Educational.
- (c) Library.
- (d) Nominations.

77. The Parliamentary Committee shall be empowered to watch the course of legislation which may affect the insane or those who have to deal with the insane, and to take such measures with regard to such legislation as it may decide upon.

78. The Educational Committee shall be entrusted with the regulations of the Examinations for the Certificates of the Association and such other matters touching the teaching of psychiatry and nursing the insane as are delegated to it by the Association or by the Council. The Registrar and the Examiners shall be *ex-officio* Members of the Committee.

79. The Library Committee shall have charge of the Library belonging to the Association, and shall keep the Council informed of the business thus entrusted to them.

80. The Nominations Committee shall consist of the President, the two immediately preceding Past-Presidents surviving, the Treasurer, the General Secretary, the Divisional Secretaries, and one of the Editors. They shall recommend to the Council, at the Meeting held at least two months before the Annual Meeting, Members for nomination by the Council under Bye-

law 74 other than the President elect. They shall also annually revise the lists of names on the Standing Committees, and adjust the same for the consideration of the Council. They shall also in their discretion nominate as Honorary and Corresponding Members those whose names are proposed under Bye-laws 10 and 13 for the consideration of the Council.

81. Special Committees may be appointed at any Meeting of the Association for any purpose which, in the opinion of the Meeting, can best be served by the appointment of a Committee. Provided that no Committee shall be appointed for the revision of the Articles or Bye-laws or other Rules and Regulations for the time being in force, nor for any purpose involving an expenditure of more than £10 of the funds of the Association, except at an Annual or Special Meeting, nor shall any Committee appointed for the latter purpose report to any meeting except an Annual Meeting.

82. Every Committee at its first Meeting shall forthwith appoint a Chairman and Secretary.

83. Every Committee may incur such reasonable expense as is necessary for the summoning of its Meetings and the record of its proceedings.

84. The President and General Secretary of the Association shall be *ex-officio* Members of Standing Committees.

85. The Reports of all Committees of the Association shall be presented to the Association, read at one of its Meetings, and thereafter dealt with in such manner as the Council may determine.

86. Committees shall render to the Council an account of all moneys received by them.

Meetings.

87. The Meetings of the Association shall be of four kinds—Annual, Quarterly, Divisional, and Special,—at any of which ten shall form a quorum. The dates of the Annual, Quarterly, and Divisional Meetings for each year shall be fixed at the Annual Meeting; but should any necessity arise for altering such dates, such alteration may be made by the General or Divisional Secretary, with the consent of the President, not less than two months before the date originally appointed for the Meeting.

Notice of all Meetings, other than Special, shall be sent with list of names of Candidates for Membership to the Editors of the JOURNAL, in time for publication if possible.

88. The following Standing Orders shall govern the proceedings at Meetings :—

(a) In the absence of the President the Meeting shall elect a Chairman, who, while occupying the Chair, shall have the same powers as the President.

(b) No Motion shall be discussed until it has been seconded.

(c) When a Motion has been made and seconded it shall be put from the Chair, and discussion thereon invited by the Chairman.

(d) No Member shall speak to the same question more than once, except as provided in Sub-section (i) of this Bye-law.

(e) At any time after discussion has been invited, and before the Motion has been put to the vote, any Member who has not previously spoken in the debate may propose an Amendment.

(f) No Amendment shall be entertained until it has been seconded.

(g) When an Amendment has been proposed and seconded it shall be put from the Chair, and then the debate may proceed on the Amendment and the original Motion together.

(h) No second Amendment may be moved while a previous Amendment is before the Meeting.

(i) A Member who has spoken to the original Motion may speak again to the Amendment.

(j) When the debate is concluded the Chairman shall put the Amendment to the vote. If the Amendment is negatived the original Motion shall again be put and another Amendment may be moved.

(k) If the Amendment is carried, the question as amended shall be put from the Chair, and further Amendments may be moved.

(l) Votes shall be taken by a show of hands, the hands being counted by the Chairman and Secretary. If the Chairman and Secretary do not agree as to the numbers there shall be a division, and the Chairman shall decide the manner in which the division shall be taken.

(m) In case the voting is equal the Chairman shall have a second or casting vote.

(n) Upon the demand of any two Members present the names of the Members voting and their votes shall be taken down, entered on the Minutes, and published in the JOURNAL.

(o) Any of the Standing Orders in any case of urgency, or upon any Motion made or a notice duly given, may be suspended at any Meeting so far as regards any business at such Meeting, provided that three fourths of the Members present shall so decide.

Annual Meetings.

89. The General Secretary shall convene in each year an Annual Meeting, at a place to be fixed by the President or Council not less than two months previously, and shall at the earliest possible date issue to each Member of the Association a circular notifying each Member of the forthcoming Meeting and requesting the contribution of papers and other scientific matter therefor.

90. A notice convening an Annual Meeting shall be sent to every Member of the Association not less than one month before the date fixed for the Meeting, and shall contain a list of the business to be transacted at the Meeting.

91. Any Member who wishes to bring forward any business at an Annual Meeting must state in writing to the General Secretary not less than six weeks beforehand the nature of the business.

92. At the Annual Meetings the business shall be taken in the following order :

(a) Confirmation of Minutes of preceding Annual Meeting.

(b) Election of the Officers and Council.

(c) Reports of the Council, Officers, and Standing Committees.

(d) Reports of Special Committees and motions arising therefrom.

(e) Motions involving alterations of the Articles or of the Bye-laws for the time being in force.

(f) Motions involving expenditure of funds.

(g) Fixing the dates of Annual, Quarterly, and Divisional Meetings of the Association, and of Quarterly Meetings of the Council.

(h) Election of Members.

- (i) Complimentary motions and announcements.
- (j) Other business of which due notice has been given, and motions arising therefrom.

(The above constitutes the private business.)

At midday the Meeting shall adjourn for a short recess, and on reassembling the President for the ensuing year shall take the Chair. He shall, after the completion or adjournment of the private business, present any prizes that may have been awarded and shall thereafter deliver his address, after which papers may be read and discussed.

93. A motion involving expenditure of the funds of the Association exceeding £25 may not be entertained except at an Annual Meeting.

94. Both the private and the public business of an Annual Meeting may be adjourned jointly and severally to any time or times and place or places agreed on by the Meeting.

95. No business shall be transacted at any Annual Meeting notice of which has not appeared in the circular convening the Meeting, unless the introduction thereof has been approved by the Council.

Quarterly Meetings.

96. Quarterly Meetings, of which there shall be not less than three yearly, shall be held in any of the Divisions of the United Kingdom, and shall be convened by the General Secretary. The place of each Quarterly Meeting shall be fixed by the President or Council, and announced in the JOURNAL if practicable not less than two months previously.

97. Every Member who desires to bring forward any business at a Quarterly Meeting shall give notice thereof in writing to the General Secretary not less than three weeks before the day fixed for the Meeting.

98. Not less than fourteen days before each meeting the General Secretary shall send to each Member a notice of the time and place of meeting, together with a list of the business to be transacted.

99. No business shall be transacted at any Quarterly Meeting notice of which has not appeared in the circular convening the Meeting, unless the introduction thereof has been approved by the Council.

100. At every Quarterly Meeting the business shall be taken in the following order :

- (a) Confirmation of Minutes of the last Quarterly Meeting.
- (b) Complimentary motions and announcements.
- (c) Reports of Committees and motions arising therefrom.
- (d) Motions.
- (e) Election of Members.
- (f) Reading and discussion of papers.

101. No resolution shall be put to the vote at a Quarterly Meeting unless it has been submitted to the President or Council, who may in his or their discretion declare that a vote thereon shall only be taken at an Annual or Special Meeting called for that purpose. But full discussion on the resolution shall be allowed at such Quarterly Meeting.

Special Meetings.

102. A Special Meeting of the Association shall be convened—

- (a) By the President if he think fit.
- (b) By the President at the written request of six Members of the Council.
- (c) By the President at the written request of twelve Members of the Association.

103. The written request to the President must state the nature of the business for which the Special Meeting is to be summoned, and no other business shall be transacted thereat.

104. The date of the Special Meeting shall be fixed by the President.

105. On resolving to call a Special Meeting, or on receiving a requisition as aforesaid, the President shall give notice to the General Secretary of the object and date of the Meeting to be called.

106. The General Secretary shall thereupon send to every Member a notice convening the Meeting and specifying the time, place, and object thereof.

Strangers at Meetings.

107. The President and Council may, in the name of the Association, invite strangers to be present at any Meeting.

108. Any Member may introduce a stranger to any Meeting,

and the stranger so introduced may join in the discussion but not in the voting.

Supplementary.

109. Subject to the Provision of the Articles and these Bye-laws, a notice may be served on behalf of the Association upon any Member, either personally, or by sending it in a prepaid letter addressed to such Member either at his registered address, or at his address in the current volume of the Medical Register; and all such notices shall be deemed sufficient for the purposes of these Articles and Bye-laws.

110. Any notice sent through the post shall be deemed to have been served at the time when the letter containing the same would be delivered in ordinary course of post, and in proving such last service it shall be sufficient to prove that the notice was properly addressed and posted.

111. No proceeding of the Association shall be invalidated by reason of a Member not having received any notice by these Bye-laws required to be given.

112. In these Bye-laws, unless there be something in the subject or context inconsistent therewith—

“The Association” means the Medico-Psychological Association of Great Britain and Ireland.

“Member” means Member of the Association.

“Annual Meeting” means the Annual General Meeting of the Association.

“Quarterly Meeting” means the General Meeting of the Association other than the Annual Meeting or a Special Meeting.

“In writing” means written, lithographed, or printed, or partly written and partly lithographed, or partly printed.

Words importing the singular number only include the plural number, and words importing the plural number only include the singular.

Words importing the masculine gender only include the feminine.

(FORM C.)

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

COUNCIL FOR THE PAST YEAR.

Officers.

	No. of Attendances at Council Meetings during the past two years.	No. of Possible Attend- ances.
President		
Ex-President.....		
President-elect		
Treasurer		
General Secretary		
Divisional Secretary for.....		
" " "		
" " "		
" " "		
" " "		
Secretary to the Educational Committee		
Registrar		
Editors		
.....		
.....		
.....		

Other Members of Council.

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(FORM D).

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

VOTING PAPER.

Officers.

Offices Vacant.	Nominations by Council.	Nominations by Member Voting.
President
President-elect
Treasurer
General Secretary
Registrar
Editors
.....

Note.—For the above the votes of those only who are actually present can be received.

Nominated Members of Council.

Nominations by Council.	Nominations by Member Voting.
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(Signed)

Note.—Every Member of the Association is entitled to one vote for each vacancy at each election of nominated Members to the Council, but shall not give more than one vote to any Candidate. Every voting paper which appears to contain more votes than there are vacancies for proposed Members of Council, or which records more than one vote for any Candidate, shall be invalid, and shall not be counted, and no voting paper shall be counted unless signed by the Member voting.

Voting papers must be handed in at the Annual Meeting, or sent by post to the General Secretary so as to reach him at least seven clear days before the Annual Meeting. Such papers must be legibly marked on the outside "Voting Paper," and shall be opened by the Scrutineers only at the Annual Meeting.

In order to vote for the Officers, Members of the Association must be present at the Annual Meeting. In voting papers sent by post, votes for nominated Members of Council only are counted.

(FORM E.)

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

VOTING PAPER.

Candidate for post of Secretary of the Division.	Recommended by—	Nominations by Members Voting.
1. A. B.....	1. C. D.....	.....
	2. E. F.....	.....
	3. G. H.....	.....
	4. I. J. ....	.....
	5. K. L.....	.....
	6. M. N.....	.....
2. O. P.....	1. Q. R.....	.....
	2. S. T. ....	.....
	3. U. V.....	.....
	4. W. X.....	.....
	5. Y. Z. ....	.....
	6. B. C.....	.....
Candidates for post of Representative Member of Council (to be elected.)		
1. D. E.	1. F. G. ....	.....
	2. H. I. ....	.....
	3. J. K. ....	.....
	4. L. M.....	.....
	5. N. O.....	.....
	6. P. Q.....	.....
2. R. S.....	1. T. U.....	.....
	2. V. W.....	.....
	3. X. Y.....	.....
	4. Z. A. ....	.....
	5. B. A.....	.....
	6. D. C.....	.....
Signed.....		

Note.—Every Member of the Division is entitled to one vote for each vacancy at each election of the Secretary and Representative Members of Council, but shall not give more than one vote to any Candidate. Every voting paper which appears to contain more votes than there are vacancies, or which records more than one vote for any Candidate, shall be invalid, and shall not be counted, and no voting paper shall be counted unless signed by the Member voting.

Voting papers must be handed in at the Divisional Meeting to be held on the day of next, or sent by post to the Divisional Secretary so as to reach him at least seven clear days before the Meeting. Such papers must be legibly marked on the outside "Voting Paper," and shall be opened by the Scrutineers only at the Meeting.

L.

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MEDICO-PSYCHOLOGICAL ASSOCIATION OF
GREAT BRITAIN AND IRELAND.

EXAMINATION FOR THE CERTIFICATE IN PSYCHOLOGICAL
MEDICINE.

*Syllabus for the Examination for the Certificate in Psychological
Medicine.*

THE examination shall consist of four parts, viz. :

1. Written examination. *Six questions in the undermentioned subjects. Three hours.*

2. *Vivâ voce* interrogation ; demonstrations from specimens, drawings, and photographs. *Time at the discretion of the examiners.*

3. Examination of a patient and written report thereon. *One hour.*

4. Certification of a patient and correction of a faulty certificate. *One hour.*

Subjects.

- I. General Symptoms and Signs of Insanity. Mental Competence. Fitness to be at Large.
- II. Causes of Insanity.
- III. Forms of Insanity.
 1. States of Weak-mindedness.
 - (a) Idiocy and Imbecility.
 - (b) Dementia.
 2. States of Stupor.
 3. States of Depression.
 4. States of Exaltation and Excitement.
 5. States of Systematised Delusion and Hallucination.
 6. Impulsive and "Moral" Insanity.
 7. General Paralysis.
- IV. Chief Accessories of Insanity.
 1. Suicidal Tendency.
 2. Homicidal Tendency.
 3. Refusal of Food.
 4. Degraded and Perverted Habits.

- V. Association of Insanity with Developmental Periods; with the Reproductive Function in its Various Phases; with Epilepsies and Convulsive States; and with other Bodily Conditions.
- VI. Morbid Anatomy.
- VII. Certification of the Insane and other Medico-legal Aspects of Insanity.

THE GASKELL PRIZE. (VALUE £30.)

[This prize was founded in 1887, to honour the memory of the late Mr. Samuel Gaskell, F.R.C.S., at one time Medical Superintendent of the Lancashire County Lunatic Asylum, Lancaster, and subsequently for seventeen years a Commissioner in Lunacy. Upon his death, in 1886, his sister, the late Mrs. Holland, gave £1000 to this Association, and other members of his family subsequently contributed further sums amounting to £340. The interest of this sum is given annually as a prize to that Assistant Medical Officer who shall most distinguish himself in an examination in the subjects hereinafter mentioned.]

1. Candidates must produce evidence—

- (a) Of having attained the age of twenty-three years.
- (b) Of having been qualified Medical Officers in one or more Asylums for at least two years.
- (c) Of possessing the Certificate in Psychological Medicine of this Association.

Candidates will be examined in the following subjects :

I. Psychology.

Mind.—Consciousness in General. Consciousness of Self, or Subject-consciousness. Consciousness of the External World, or Object-consciousness. Relation of Mind to Nervous Function.

Feeling.—(a) Sensation : The General Senses — of Temperature, of Energy and Fatigue, of Effort. The Special Senses. Disorders of Sensation.

(b) Emotion : Pleasure and Pain. Fear, Anger, Suspicion, Amatory Emotion, Modesty, Self-reliance, and Self-esteem. The Circumstances which justify these Emotions. Disorders of these Emotions.

Intellect.—(a) Perception—of Direction, of Distance'

of Form, of Magnitude, of Resistance, of Solidity. Apperception. Disorders of Perception. Hallucination. Illusion.

(b) Attention : Reflex Attention. Voluntary Attention. Disorders of Attention.

(c) Association : Laws of Association.

(d) Memory : Remembrance. Recollection. Habit. Automatism. Reflex Action. Their Relation to Memory. Disorders of Memory. Defect and Loss of Memory. Mnemonic Delusion.

(e) Reasoning : Discrimination. Assimilation. Judgment. Belief. Doubt. Disorders of Reasoning. Delusion. Varieties of Delusion.

Will.—Desire. Motive. Deliberation. Choice. Hesitation. Disorders of Conation. *Folie du Doute*. Imperative Ideas.

Conduct.—Main Divisions of Conduct. Disorders of Conduct. Insane Conduct.

II. General Anatomy and Physiology of the Nervous System. Healthy and Morbid Histology. Nerve-centres : their Constitution, their General Arrangement. Localisation. Nervous Discharge.

Nervous Resistance. Inhibition.

III. Psychological Medicine.

I. General Symptoms and Signs of Insanity. Mental Competence. Fitness to be at Large.

II. Causes of Insanity.

III. Forms of Insanity.

1. States of Weak-mindedness.

(a) Idiocy and Imbecility.

(b) Dementia.

2. States of Stupor.

3. States of Depression.

4. States of Exaltation and Excitement.

5. States of Systematised Delusion and Hallucination.

6. Impulsive and "Moral" Insanity.

7. General Paralysis.

IV. Chief Accessories of Insanity.

1. Suicidal Tendency.

2. Homicidal Tendency.

3. Refusal of Food.
 4. Degraded and Perverted Habits.
 - V. Association of Insanity with Developmental Periods ;
with the Reproductive Function in its Various
Phases ; with Epilepsies and Convulsive States ; and
with other Bodily Conditions.
 - IV. Certification of the Insane and other Medico-Legal
Aspects of Insanity.
 - IV. Clinical Cases with Commentaries.
-

REGULATIONS FOR THE TRAINING AND EXAMINATION OF
CANDIDATES FOR THE CERTIFICATE OF PROFICIENCY
IN NURSING AND ATTENDING ON THE INSANE.

THE Educational Committee shall be charged with the responsibility of seeing that the regulations made from time to time by the Association for training and certification of attendants and nurses are faithfully carried out.

Training.

1. A probationary period of three months is required to be served before an attendant is considered to have formally begun training.
2. Except as hereunder provided, every attendant must be trained in an institution for the treatment of mental disorder for not less than two years, including the probationary period, before he can become a candidate for examination. The two years must be complete on or before the date of the examination.
3. The Council may recognise any institution as an Institution for the Treatment of Mental Disorder for the purpose of these Regulations, and may determine with respect to any such institution whether the whole period of training may be passed therein ; or if not the whole, then what length of training in such institution may count as part of the two years required by Regulation 2.

4. In cases of exceptional character, in which a person has had large experience of nursing the insane, but has been unable, through no fault of his own, to comply precisely with these Regulations, application may be made to the Registrar to lay the circumstances of such case before the Council, which may, in its discretion, order that such candidate be admitted to the examination. Provided that every such application be accompanied by a recommendation from a member of the Association, and by evidence that the applicant has had experience of nursing and attending on the insane in an institution.

5. The system of training required by the Association consists of—

- (a) Systematic lectures and demonstrations by the Medical Staff of the Institution. At least twelve lectures, each of one hour's duration, must be given in each year of training; and no attendant will be admitted to examination who has not attended at least nine lectures in each year.
- (b) Clinical instruction in the wards by the Medical Staff.
- (c) Exercises under the Head and Charge Attendants in the practice of nursing and attendance on the insane.
- (d) Study of the 'Handbook of Nursing' issued by the Association. Other books may be used in addition.
- (e) Periodical examinations, the nature and frequency of which are left to the discretion of the Superintendent, but one examination at least should be held in each year.

6. The scope of training must be such as to impart a knowledge (1) of the main outlines of bodily structure and function, sufficient to enable attendants to understand the principles of nursing and of "first aid," especially with regard to the accidents and injuries most likely to occur among the insane; (2) of the general features and varieties of mental disorder; (3) of the ordinary requirements of sick nursing, and especially of the requirements of nursing and attending on the insane. For particulars see the syllabus of the examination.

Examinations.

7. The candidate shall obtain from the Registrar a schedule, which shall be filled up and signed as required, and returned to the Registrar at least four weeks before the examination. The Registrar has no power to admit to examination any

candidate whose schedule does not show that he has complied in every respect with these regulations, and no such candidate will be permitted to enter for the examination. The schedule must be signed by the Superintendent or Acting Superintendent.

8. If, between the signing of such certificates as are required by the schedule and the time of the examination, the candidate should be guilty of misconduct, such as, if committed before the signing of such certificates, would have precluded the granting thereof, such misconduct shall be at once reported to the Registrar, and by him be reported to the President. On such report the President may, if he think fit, order that the examination of a candidate be postponed; in which case he shall inform the Council at its next meeting both of the fact and of his reasons for thus acting. The Council shall consider the matter, and may order that the candidate shall be refused admittance to the ensuing or any examination, and in that case shall give notice to the Registrar, who shall be empowered to return the examination fee, and shall take such steps as shall in his judgment carry out the order of the Council.

9. Examinations shall be held by the Association under the following conditions :

- (a) Examinations shall be held twice yearly, on the first Monday in May and the first Monday in November.
- (b) An examination shall be held at every institution in which there are candidates.
- (c) The examinations shall be partly written and partly *vivâ voce* and practical, the questions in each part being confined to the subjects in the syllabus.
- (d) The papers shall be set, and the written answers examined by Examiners in Nursing appointed by the Association for this purpose.
- (e) The examinations shall be conducted as follows :—The written examinations, which must not exceed four hours in duration, shall take place on the days fixed, under the supervision of the Superintendent of the Institution, who is responsible for the observance of the Regulations.
- (f) The *vivâ voce* and practical examinations shall be conducted by the Superintendent and a Coadjutor on as early a date after the fixed day as can be arranged.
- (g) The Coadjutor shall be the present or past Superinten-

dent, or the Acting Superintendent, or a Senior Assistant Medical Officer of not less than five years' standing of another institution, and must be approved by the President of the Association.

- (h) The Coadjutor shall take a share at least as great as that of the Superintendent in the actual examination of candidates.
- (i) Candidates must satisfy the Examiners in both departments of the examination.
- (k) The Superintendent shall send to the Registrar after each examination a list of the candidates who have satisfied the Examiners in the *vivâ voce* and practical part of the examination.

Certificates.

10. Certificates of proficiency will be granted under the following conditions:

- (a) The certificates shall be in the form appended.
- (b) Certificates shall be dated, shall bear consecutive numbers, and shall be sealed with the seal of the Association.
- (c) Certificates shall be signed by the Examiners, by the Examining Superintendent and his Coadjutor, and countersigned by the President and Registrar.

Register.

11. A Register shall be kept by the Registrar of the Association; and that Register shall contain the names of all persons who have received a certificate.

12. When a person registered has, either before or after he is so registered, been convicted before a court of competent jurisdiction in His Majesty's dominions or elsewhere of an offence which, if committed in England, would be a felony or misdemeanour, or an offence under the Lunacy Acts then in force, or has been guilty of conduct which, in the discretion of the Council, renders such person unfit to hold a certificate, that person shall be liable to have his name erased from the Register.

13. It shall be the duty of the Superintendent or other member of the Association having knowledge of the facts to at

once transmit a report of the circumstances of the case of a person alleged to be liable to have his name erased under Regulation 12 to the Registrar, who shall lay the same before the Council for consideration, and on proof to the satisfaction of the Council of such conviction or such conduct as aforesaid, the Council may direct the Registrar to erase the name of such person from the Register and the certificate of such person shall be forfeited.

Provided that the name of a person shall not be erased on account of a conviction for an offence which, though within the provisions of Regulation 12, does not in the opinion of the Council, either from the trivial nature of the offence or from the circumstances under which it was committed, disqualify a person from holding a certificate.

14. When a person holding a certificate is reported to the Registrar under the provisions of the preceding regulations, the Registrar shall forthwith send notice to such person calling upon him to show cause why he should not be dealt with by the Council, and shall transmit to him a copy of the following Regulation :

15. Any person holding a certificate who is alleged to be liable to have his name erased from the Register and whose case has been reported to the Council may make a statement to the Council, either personally or in writing, but before any such statement will be received by the Council such person must deposit his certificate with the Registrar. In case the Council determine to take no action in the matter the certificate will be returned to such person. If any such person shall fail to deposit his certificate within fourteen days after receiving notice of this Regulation, and shall be unable to account to the satisfaction of the Council for the delay, such person shall be deemed to admit the truth of the charges made against him, and the Council may thereupon act as if the same had been proved to their satisfaction.

16. Any person shall be deemed to have received the notice required in Regulation 14 twenty-four hours after such notice has been posted in a registered letter to his last known address.

17. The Council may at any time direct the Registrar to restore to the Register any name erased therefrom in any case in which it may seem to them just or expedient so to do, or they may in any case direct the certificate to be suspended for

a period in lieu of directing the name of the holder thereof to be erased.

Fees.

18. Each candidate is required to send 5s. with the schedule filled up and signed to the Registrar. In case a candidate fails to pass the examination the fee will not be returned to him, but he will be admitted to a subsequent examination on payment of a fee of 2s. 6d.

General.

19. These Regulations shall apply to all attendants who present themselves for examination after October 31st, 1900.

20. In these Regulations, unless the context be inconsistent therewith—

“The Association” means the Medico-Psychological Association of Great Britain and Ireland.

“The Council,” “The President,” “The Registrar,” mean the Council, President, and Registrar respectively of the Association.

“Institution” means an institution for the treatment of mental disorders as defined in Regulation 3.

“Register” means the register of the names of holders of the certificate of competence in nursing and attending on the insane.

“Superintendent” means the medical superintendent of an institution for the treatment of mental disorder.

Words importing the masculine gender only include the feminine.

Certificate referred to in Regulation 10 (a).

This is to certify that A. B—, having been duly trained, has, after examination by us, shown that he has attained proficiency in nursing and attendance upon the insane.

(Signed)	} Examiners.	..... Examining
.....		Superintendent.
.....		

..... Coadjutor.

Countersigned) President. Registrar.

Dated

No.



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Part I.—Original Articles.

Quantitative and Qualitative Leucocyte Counts in various forms of Mental Disease. By LEWIS C. BRUCE, M.D., Physician Superintendent, and A. S. M. PEEBLES, M.D., Assistant Physician, Perth District Asylum, Murthly.

THE following observations are the result of three years' work in examining the leucocytes in the various patients admitted to the Perth District Asylum. During this period the blood of 150 patients has been systematically examined, not on one or two occasions only, but often for weeks and months at a time. We have observed in medical literature observations recorded on the leucocytosis occurring in various forms of insanity in which the observer had made many observations on different patients, but as a rule limited the observations made on each individual patient to one, two, or at most three occasions. Such records are of little or no value, and would be on a par with the observations of, let us say, an astronomer who, having examined the heavens on two nights out of the 365, and having found both nights cloudy, reported that no such things as stars existed. With regard to the technique employed for the estimation of the number of leucocytes per c.mm. of blood, we have throughout employed Coles' system of counting "fields" with the counting slide of a

Thoma Zeiss' hæmocytometer. Never less than thirty fields were counted for each enumeration, and frequently sixty and eighty fields were counted when extra accuracy was deemed necessary.

The differential counts were made from films stained at first by eosine and hæmatoxylin, Leishman's stain, but latterly entirely by Louis Jenner's stain. This stain, especially when home-made from tabloids, is the most satisfactory we have had for general use. Never less than 200 cells were enumerated in each count. An oil immersion lens is almost necessary for this work.

In differential counts we recognise the following varieties :

1. Polymorphonuclear leucocytes with neutrophile granules.
2. Small lymphocytes ; cells about the size of a red blood corpuscle with a deeply stained nucleus which occupies nearly the whole of the cell, the perinuclear protoplasm being of very limited extent and staining with basic dyes.
3. Large lymphocytes ; cells larger than a red corpuscle with a nucleus which stains less darkly than in the ordinary lymphocyte ; the perinuclear protoplasm being well marked and staining with basic dyes. We also include under large lymphocytes the hyaline or large mononuclears, cells which vary from 8-12 μ in diameter. The nucleus is large and stains faintly. The cell protoplasm also stains very faintly with the basic dyes.
4. The eosinophile leucocyte.
5. Mast cells with large basophile granules.

For purposes of comparison we made numerous control counts from the blood of various members of the staff. We found in these control cases that the leucocytes per c.mm. of blood varied from 6000 to 9000 in young healthy men and from 6000 to 13,000 in women. Several of the women were anæmic.

The average percentage of the different forms of cells in the control men were as follows : Polymorphonuclear, 70 *per cent.* ; small lymphocytes, 20·5 *per cent.* ; large lymphocytes, 8 *per cent.* ; eosinophiles, 1·5 *per cent.* ; and in the control women, polymorphonuclear, 60 *per cent.* ; small lymphocytes, 30·5 *per cent.* ; large lymphocytes, 7·5 *per cent.* ; eosinophiles, 2 *per cent.*

Mast cells occurred occasionally, and a percentage of ·5 to 1

was met with in the control bloods. For purposes of description we have divided our cases under the various forms of mental disease. Under melancholia we have—simple melancholia, acute melancholia, excited melancholia, and delusional melancholia.

All the cases of simple melancholia which we have examined eventually became excited, and we describe their leucocyte counts therefore under “folie circulaire.”

In pure cases of acute melancholia—a disease which I tried to describe, as I saw it, in the *Journal of Mental Science* for October, 1900—we have never found a leucocytosis. The leucocytes per c.mm. of blood varied from 7000 to 13,000, the polymorphonuclear cells from 55 to 70 *per cent.*, the small lymphocytes from 31 to 20 *per cent.*, the large lymphocytes from 5 to 10 *per cent.* The eosinophiles never exceeded 1 *per cent.*, and in a few cases an occasional mast cell was seen. This observation is of practical value, because when one is asked to examine an early case of melancholia which has not fully developed, and one finds a hyperleucocytosis, and especially if the polymorphonuclear percentage is above 70, the prognosis must be guarded. On the other hand, when you examine a case and find the leucocytosis below 10,000 the prognosis is good, but it is always well to remember that the onset of some cases of delusional insanity cannot be distinguished from acute melancholia, and in these cases also there is no hyperleucocytosis, so far as we have been able to observe.

Every case of excited melancholia which we examined presented a high leucocytosis early in the disease. Taking one of our typical cases, we found on admission January 3rd, 1902, a leucocytosis of 15,000; on January 5th, 14,000; on January 7th, 10,000; and on January 9th, 17,000. Early in the disease also, and coinciding with the hyperleucocytosis the percentage of polymorphonuclear cells was frequently above 70; later in the disease during relapses it is quite common to get a hyperleucocytosis of 20,000 or 30,000 with a polymorphonuclear percentage of 80, or even higher. A relapse generally is preceded by a fall of the leucocytosis to 10,000 or 13,000 with a low polymorphonuclear percentage. As the excitement increases, the leucocytosis gradually rises, and the percentage of polymorphonuclear cells also rises until the attack reaches its height. When such a case recovers the leucocytosis remains high, but

the percentage of polymorphonuclear cells generally falls to 60, or below 60. The leucocytosis of a case of excited melancholia is exactly similar to that of acute continuous mania.

There appear to us to be two types of delusional melancholia, one resembling acute melancholia in the physical symptoms in which a delusion or delusions constitute the outstanding mental symptom. In all such cases there is a high leucocytosis which resembles the leucocytosis in excited melancholia. The second type is more like simple melancholia physically, but there are fixed delusions, and the patient is frequently suicidal. As a rule, in such case the leucocytosis is below 13,000, and the polymorphonuclear percentage rarely touches 70.

States of mental excitement.—All the cases of simple mania which we have been able to examine eventually proved to be cases of "folie circulaire," and the leucocyte counts are enumerated under that disease.

The leucocytosis of acute continuous mania and recurrent mania in adolescent cases have been described by me in the *Journal of Mental Science*, April and July, 1903. The leucocytosis exactly resembles that of excited melancholia, and a notable feature in all three diseases is the fact that upon recovery taking place a hyperleucocytosis is persistent for months and even years after discharge from the asylum. In cases which do not recover, but become chronic, the leucocytosis falls, and the percentage of polymorphonuclear cells is often below 50. If recovery does eventually take place in these chronic cases, it is invariably accompanied by a rise of the leucocytosis and an increased polymorphonuclear percentage. This observation is also of practical importance, because if, on examining the blood in a case of continuous mania, you find a leucocytosis of, say, 10,000, with a polymorphonuclear percentage of, say, 50, the prognosis is bad. Artificially raising the leucocytosis can be readily accomplished by injecting 1 or 2 c.c. of turpentine subcutaneously into the flank. Some cases of mania recover at once under this treatment, but others are not benefited, and it is noticeable in these cases refractory to treatment that there is apparently a failure in the production of a leucocytosis for a sufficient length of time to simulate the leucocytosis which occurs during natural recovery.

Recurring mental states.—All the cases of "folie circulaire" which we have so far been able to examine exhibited depression

or excitement of the simple melancholia or simple mania type. During the depressed stage we invariably found a high leucocytosis, with a polymorphonuclear percentage between 60 and 70. If a period of apparent sanity followed the depression, the leucocytosis still remained high, but the polymorphonuclear percentage fell to about 60. When excitement set in the leucocytosis at first fell to 10,000, 11,000 or 12,000, and the percentage of polymorphonuclear cells was also low, generally about 50. As the excitement increased the leucocytosis gradually rose, culminating at the height of the excitement, and then gradually fell to normal. Two typical cases were, however, discharged still showing a hyperleucocytosis of 16,000 or 17,000. These observations strongly point to the fact that the depression and excitement of cases of "folie circulaire" are quite different from ordinary attacks of mania and melancholia.

Cases of recurrent mania—in which class we do not include alcoholic cases—have a persistent leucocytosis which first rises and then falls somewhat as an attack comes on, rises gradually with the attack and then falls slightly as the attack passes off, but rarely falls to normal for more than a few days. The polymorphonuclear percentage follows the general curve of the hyperleucocytosis. Between the excited periods the large lymphocytes and hyaline cells are much increased, often reaching 20 *per cent.* One of our cases of recurrent mania suffered from severe facial erysipelas, which induced a hyperleucocytosis of 28,000, with a polymorphonuclear percentage of 89, and following this illness there was a cessation of mental attacks for four months.

Alcoholic insanity.—We have never had the opportunity of examining a case of delirium tremens; but the leucocytosis of acute continuous alcoholic mania follows in every detail that of cases of acute continuous mania of non-alcoholic origin, and leads us to suggest that the alcohol was merely an exciting cause, breaking down the resistive power of a patient predisposed by heredity to the infection of this type of disease.

The delusional alcoholic cases never exhibited any leucocytosis whatever.

We have never been able to examine a true case of dipsomania.

Hebephrenia.—Cases of hebephrenia vary a good deal. For the most part the leucocytosis is about 12,000 to 14,000, but

every now and then they present a marked hyperleucocytosis, with little or no increase of the polymorphonuclear percentage, the increase being chiefly due to the hyaline or large mononuclear cells, which may vary between 20 and 30 *per cent.* Only one of our cases has recovered, and in his case the leucocytosis never rose above 14,000, and upon recovery fell to normal.

We described the leucocytosis of katatonia in the *Journal of Mental Science*, October, 1903, and the only fact we have to add to these observations is that in all the cases which recovered, during the period of recovery the patients exhibited a distinct but transient eosinophilia, the eosinophile cells rising to 5 or 10 *per cent.*

All cases of delusional insanity, whether cases of paranoia or occurring later in life, were entirely free from hyperleucocytosis.

General paralysis of the insane.—Three years ago in the *Brit. Med. Jour.*, June 29th, 1901, I described the leucocytosis of general paralysis, and later results have confirmed these early observations. The leucocytosis of general paralysis largely depends upon the character of the particular case. In a classical case at the onset there is always a hyperleucocytosis with a high polymorphonuclear percentage, and the higher the leucocytosis, *i. e.* the more vigorous the reaction to the poison causing the disease, the more marked is the apparent remission which follows. In the second stage the leucocytosis follows the course of the disease—if there is a febrile attack up goes the leucocytosis; the polymorphonuclear percentage also rises somewhat. During the third stage the leucocytosis becomes very irregular—one day up to 30,000 and the next below 10,000 per c.mm. of blood. The polymorphonuclear percentage may fall very low—40 or even lower—and there is a great increase of lymphocytes. Transient eosinophilias are quite common, especially during the second stage of the disease.

If a patient recovers, or enters upon a marked remission equivalent to recovery, the leucocytosis invariably falls to normal, but the polymorphonuclear percentage is generally very low—between 40 and 50. So far we have only been able to examine three such cases.

Epileptic insanity.—Every case of epilepsy has shown hyperleucocytosis, not only during periods when the patients were suffering from epileptic seizures, but even in the intervals

when the patient was quite free from attacks. The most marked period of hyperleucocytosis follows a fit or occurs during the period when the patient suffers from a series of seizures. We have had one case of "masked epilepsy" and one case of "convulsive melancholia" under observation, which both showed marked hyperleucocytosis.

Of drug insanities we have had no experience, but I examined a case of mania for Dr. Urquhart which was supposed to have been induced by poisoning with thyroid extract. I made only two observations, but on both days there was a hyperleucocytosis with an average percentage of polymorphs.

The leucocytosis of cases of puerperal insanity does not differ from that of acute mania. In the only two cases of lactational insanity we have been able to examine the leucocytosis was similar to that of an ordinary anæmic woman.

All cases of senile insanity presented a high or low leucocytosis according to the disease from which they suffered.

It will be noticed then that, with the exception of one variety of melancholia and all cases of delusional insanity, all types of acute mental disease present more or less this symptom of hyperleucocytosis, and the persistence of this symptom, after apparent recovery in some cases and during the whole course of the disease in others which do not recover, is an interesting fact, and demonstrates what hardly requires demonstration, that as yet we know very little about the causes, course, and termination of the various diseases called "mental."

The differences which occur in the character of the individual cells is often very striking. In young strong patients the polymorphonuclear cells are large and well formed with well-marked granules. In old or debilitated patients the polymorphonuclear cells tend to be smaller, and the granules are small and often stain badly.

Distinctly degenerated, vacuolated and breaking down cells occur sometimes in acute and debilitated cases. We practically never found marrow cells, nor did we ever find a cell exhibiting distinct evidences of phagocytosis.

Large lymphocyte cells—excluding the hyaline variety—are said to be uncommon in healthy blood. They are frequently increased in the various forms of mental disease, but most markedly in hebephrenia, katatonia, recurrent mania, and any case which is much debilitated.

DISCUSSION

At the Quarterly Meeting of the Medico-Psychological Association in London,
May 18th, 1904.

Dr. ROBERT JONES admitted he had not been able to work much in the particular field which Dr. Bruce had just demonstrated. It showed marked vigour on the part of a young superintendent that he was able to combine with so much success the administrative and the scientific aspects of the work. He (Dr. Jones) had often thought that there was a considerable amount of information to be obtained from the examination of the blood, and it had now become a very simple matter. One used the little instrument designed by Thoma-Zeiss, only a small quantity of blood was necessary, and the Jenner soloids or tabloids from Burroughs and Wellcome completed the equipment, and the matter was carried through without much trouble. The interest which blood examinations would have was probably great, and the observations could be carried out *in corpore* or *in vitro*. One could verify for oneself that there must be a good deal of reason for the theories about blood immunity, agglutinins, precipitins, haptophores, and the various technical terms with which the literature of the subject abounded. Toxins, such as that of tetanus, could be mixed with the nerve matter outside the body, and the antitoxin demonstrated. Unless one kept up actively with the chemical and microscopical literature of the present day, medical men would find themselves very quickly out of touch with the best work which had been done in their own particular branch. Coming to a more practical point, there were certain drugs which were known to definitely increase certain cells in the blood; pilocarpine, for instance, was said to increase the lymphocytes particularly; again, cinchinate of soda and camphor, both vaunted remedies for cancer and tuberculosis and such like ailments, possibly because these, to some extent, altered the leucocytes, which Dr. Bruce pointed out as occurring in some cases when convalescing, are said to increase the polymorphs; he would like to ask Dr. Bruce if he had tried the effects of these drugs. The question of immunity again was a very large one, and he would not prolong the meeting by discussing it; but the Association was greatly indebted to Dr. Bruce for his demonstration.

Dr. BRUCE, in reply, said Dr. Peebles and he had tried cinchinate of soda and other drugs, and found that though they increased the lymphocytes they did not increase the polymorphs. Leucocyte examinations gave a certain amount of assistance in prognosis, and a forecast was often asked for in the cases which one was called upon to examine. Some time ago he saw a patient in regard to whom it became necessary to say whether he would be likely to make an early recovery or not. It was a case of melancholia. The leucocytosis was 20,000 and the polymorphs nearly 80 *per cent*. The patient had had one previous attack. There was no possibility of that patient recovering under months, and perhaps longer. A case of melancholia with a high leucocytosis might be looked upon as absolutely certain to have a prolonged attack, in the present state of knowledge of the treatment of those forms of disease. There was another case which he would like to cite. The friends were very badly off, and they were keeping the patient in the country in charge of a nurse, straining their resources to the utmost in doing so. He made a blood count, and found the proportion of leucocytes high. The patient looked as if she would make a good fight against the disease, which was excited melancholia. He said at that time he thought it would be well to continue the treatment. Two months later he examined the blood again, and the polymorphs were down to 40 *per cent*.; there were many transitional forms and many were vacuolated. When that was observed one could conclude that the resistive force was failing. He therefore advised that the patient should be placed in an asylum. So far as he knew that woman would never recover, and he did not think she had improved at all. Since she was admitted to the asylum she had become dirty in her habits and demented. In cases of mania, however, one was very apt to be mistaken. He was asked to see a case of acute mania which showed a leucocytosis of 20,000 and polymorphs over 70 *per cent*., on the strength of which he said the patient would be well in three months. That was two years ago, but she was now as grave a case as he had ever seen. So what he had pointed out did

not help the forecast in every case. Still, it afforded a great deal of assistance in a large number of cases in giving a tentative prognosis.

Dr. A. R. URQUHART said he would like to add a word to what Dr. Bruce had said with regard to prognosis. In a case to which he referred a young lady had overdosed herself with thyroid for a considerable time, and Dr. Bruce, after an examination of the blood, concluded she was on the high road to recovery, and he proved correct in a very difficult set of circumstances. The tables exhibited represented years of most arduous labour on the part of Dr. Bruce and his assistants, and he was sure no body of men would be keener to give every credit to workers in the speciality than the members of the Medico-Psychological Association. Members were more interested in the results than in the methods; some of them had scarcely time, or inclination, or even ability to prosecute such very difficult and long-drawn inquiries, but the Association included a number of active and willing workers who had demonstrated the value of those methods, and none had done so up to date more than Dr. Lewis Bruce.

A Statistical Note on the Social Causes of Alcoholism.

By W. C. SULLIVAN, M.D., Deputy Medical Officer, H.M. Prison, Pentonville.

THE object of this paper is to draw attention to the nature of the social conditions that lead respectively to drunkenness and to chronic alcoholism, and to point out that these two phenomena are in great measure related to two distinct types of drinking, differing in origin, differing enormously in social gravity, and corresponding to quite different statistical measures.

The two types of drinking referred to may be conveniently distinguished as luxury drinking and misery drinking. By the former is meant the drinking that belongs to relative well-being, temporary or permanent. It will include, for instance, all the forms of convivial drinking, the drinking connected with social and religious celebrations, and the like. Misery drinking, on the other hand, indicates the drinking that goes with conditions of relative ill-being, when what is sought from alcohol is the relief of painful emotional states, or the capacity to react to stresses which the drinker would otherwise feel to be in excess of his powers. This form of drinking, therefore, includes the drinking related to overwork, insufficient or unattractive food, overcrowding, bad hygienic conditions of all sorts. Having regard to what is the chief factor in either variety, we may also describe these opposed forms of drinking as convivial drinking and industrial drinking. To take a concrete instance, the workman who carouses with his comrades on a Saturday night is a type of the convivial drinker; the labourer who, before a

task which calls for special effort, has to brace himself with a half-quartern of rum, is a type of the industrial drinker.

Of course, in fact these two forms of drinking are frequently combined; the convivial drinker if he eventually becomes chronically intoxicated, is thereby brought to the state of the misery drinker; often indeed the diversion of part of his income to luxury drinking involves a lowering of diet which reduces him in a sense to misery drinking. On the other hand, any momentary improvement in the circumstances of the industrial drinker is for him an occasion, and one which he rarely neglects, to indulge in convivial excess. Such facts do not, however, affect the reality of this distinction; nor do they detract from its value as an instrument of analysis for the examination of statistical data.

Its utility in this latter respect depends on the different relation which the two forms of drinking bear to chronic alcoholism and to drunkenness. Luxury drinking, the drinking that goes with conditions of comparative well-being, is by its nature apt to be intermittent; in countries and classes of low culture it is very likely to run to immediate excess, but its tendency to produce chronic alcoholism is not as a rule very strong. With industrial drinking it is different. It is characteristic of this form of drinking that it goes on during working hours or in the brief interruptions of labour, and further that it is likely to be in substitution of food. It is thus more or less constant in its operation, and therefore tends rapidly and fatally to chronic alcoholism. It leads to drunkenness too, but rather as a secondary result. From a statistical point of view, accordingly, we have two sorts of drunkenness to distinguish—the drunkenness that occurs without chronic alcoholism and indicates convivial excess, and the drunkenness that is associated with chronic alcoholism and is related to industrial drinking.

What makes the matter practically important is, of course, that by far the larger and more serious part of the social evils connected with excessive drinking depend on chronic alcoholism. This is true of racial degenerescence, of insanity, and of suicide; so far as these ills are caused by drink—and its share in their production is admittedly a large one—they are caused by the chronic intoxication. And, though in a less degree, the same thing holds of prostitution, pauperism, and at

least several of the graver forms of crime. The bulk of the mischief done by alcohol is therefore due to misery drinking, relatively little to convivial drinking. And this is why, as Grotjahn has well shown, alcoholism only attains the proportions of a social problem in modern times, and in countries which provide the conditions of misery drinking, of which industrialism is by far the most important. In antiquity, as in most of the countries of Southern Europe to-day, there is no drink question.

The importance of this distinction of the two radical types of drinking is shown very clearly in the phenomena of alcoholism in England, and the statistical study of these phenomena on which we have now to enter will serve accordingly as at once an example and a justification of our point of view.

As has been already implied, the method of analysis adopted will be mainly the comparison of statistics of drunkenness with statistics which may be taken to measure chronic alcoholism. The chief difficulty is, of course, in regard of the second point. The best index of chronic alcoholism ought obviously to be found in the mortality returns; and though the defective system of death registration gives them only a very qualified value as measures of the absolute amount of alcoholism, they are undoubtedly fairly reliable for comparative purposes, as long, at least, as they deal with sections of the population of pretty similar social standing and are estimated over a sufficient period of time. A more serious obstacle to their use, from our present point of view, is that, as so frequently happens with English statistics, it is impossible to correlate them strictly with other statistical data. In the first place, the registration county which furnishes the mortality returns is not identical with the area of the same name which gives the figures for drunkenness. And, what is a still greater difficulty, there are no available figures for alcoholic mortality for lesser areas than the registration county, so that it is impossible to form composite districts representing special industrial conditions, as can be done in examining drunkenness. This is a serious drawback, for in an inquiry into a phenomenon such as alcoholism the county is, for obvious reasons, a very inconvenient unit. It is necessary, therefore, to have some other test of chronic alcoholism which can be statistically measured, and which can be used to control the mortality figures, and to replace them where they are not

available. Evidence, which I have elsewhere set out in detail, justifies, I think, the assumption that in this country and at the present time we have such a test in the phenomenon of suicidal attempts.⁽¹⁾ We know, in fact, from clinical experience that in the overwhelming majority of cases these attempts are related to chronic alcoholism; and statistics show that in their age incidence and—as far as ascertainable—in their other characters also, such as their independence of religious influences, they conform completely to the type of alcoholic suicide and differ from that of ordinary suicide. And when we compare, as we shall presently do, the regional distribution of chronic alcoholism with that of suicidal attempts, we shall find therein further evidence of the intimate connection of these two phenomena.

Unfortunately, these statistics of suicidal attempts have one rather serious disadvantage which they share with the mortality returns—both phenomena are represented by scanty numbers, so that slight oscillations, well within the normal ranges, are likely to show in an exaggerated form. This may easily occur, for instance, in the smaller counties, and is probably the explanation of some of the irregular results shown below in Table I. This difficulty is unavoidable; chronic alcoholism, at least as compared with drunkenness, is an infrequent condition, and the phenomena that express it are necessarily on a correspondingly small scale. In 1900, for instance, in England and Wales, while the number of prosecutions for drunkenness amounted to 204,349, the number of cases of attempted suicide was only 1795, the registered deaths from alcoholism were 3638, and from cirrhosis of the liver 4639.

However, if large areas are used, and if a sufficiently long series of years is taken, this source of error is considerably diminished, and conclusions based on these statistical data may be taken as fairly reliable, at all events when concordant with other evidence.

The first series of figures which we have to examine (Table I) gives the rates per 100,000 of the population of (a) deaths from chronic alcoholism, delirium tremens and cirrhosis of the liver; (b) arrests for drunkenness; and (c) attempts to commit suicide in the different counties of England and in North and South Wales. As stated above, the mortality rates refer to registration counties; the other two phenomena have been estimated in relation to administrative counties, which approach more

TABLE I.—*Deaths from Alcoholism and Cirrhosis of the Liver, Arrests for Drunkenness, and Attempts to Commit Suicide in the Counties of England, and in North and South Wales—Annual Average per 100,000 of the Estimated Population in the Decennial Period 1891 to 1900.*

	Deaths from alcoholism and cirrhosis of the liver.	Arrests for drunkenness.	Attempts to commit suicide.
Lancashire	25'29	806'4	6'57
Warwick	24'70	599'2	8'56
London with Metropolitan Counties .	24'18	748'7	9'43
Shropshire	22'92	661'3	3'36
Northumberland	22'36	1643'8	6'37
Sussex	22'32	312'5	4'78
Buckingham	21'76	97'0	2'80
Cheshire	20'48	546'2	4'72
Derbyshire	20'44	510'1	3'94
Cambridge	19'82	100'6	1'77
Somerset	19'70	246'7	4'67
Hampshire	19'61	390'9	7'82
Worcester	19'50	676'4	5'38
Stafford	18'86	695'4	3'69
Rutland	18'39	153'9	1'49
Nottingham	18'03	541'7	5'85
Westmoreland	18'03	340'8	2'14
Berkshire	17'79	252'6	4'82
Bedford	17'75	184'3	1'80
Huntingdon	17'69	210'0	2'01
York—West Riding	16'67	644'1	4'17
Oxford	16'22	161'5	3'88
Leicester	16'19	261'5	4'62
North Wales	16'07	569'9	1'99
York—East Riding	15'97	620'7	4'55
Durham	15'90	2228'8	4'32
Hereford	15'50	297'8	3'47
Wilts	15'44	172'6	2'62
York—North Riding	15'67	475'7	2'87
Norfolk	15'39	200'7	2'77
Devon	15'38	343'7	4'32
Cumberland	14'92	689'7	2'47
Suffolk	14'61	143'1	2'12
Gloucester	14'41	290'7	4'93
Lincoln	13'85	261'5	4'14
Northampton	13'66	296'4	6'73
South Wales	13'61	1012'9	2'59
Dorset	13'10	209'5	3'69
Monmouth	12'81	629'3	2'22
Cornwall	8'50	230'1	1'11

The Metropolis is here combined in a single area with the counties which contribute to the police district—Middlesex, Surrey, Hertford, Kent, and Essex.

nearly to the police areas furnishing the returns. This approximate method is the only one available in the muddled state of judicial and administrative regional divisions. In the case of London the figures for drunkenness and attempted suicide are those given for the Metropolitan Police District and estimated in relation to the population of that district. The difference between this area and that of registration London is, of course, so great as to render any comparison of the figures under these heads with the mortality rates quite fallacious as regards both London itself and the counties that contribute to the police district. For our purposes, accordingly, these counties, with the Metropolis, will be treated as a single area. The figures in all cases are the mean figures for the decennial period 1891—1900, and the ratio is to the mean between the census population of 1891 and that of 1901. The counties are arranged in the order of the decreasing frequency of deaths from alcoholism.

Allowing for the sources of error mentioned above, this table on the whole goes to show that, while in the lower figures there is a fairly good parallelism between the three columns, in the higher figures there is much more correspondence between deaths from alcoholism and cases of attempted suicide than there is between either of these phenomena and arrests for drunkenness. The exceptions to this tendency are chiefly small counties where the results are, of course, least reliable. And it will also be observed that the divergence between the frequency of drunkenness and the frequency of deaths from alcoholism and of suicidal attempts is most marked in counties where the rate of drunkenness is high. The mining districts show this particularly well. The most important of them—Durham, Northumberland, and South Wales—form a special group at the top of the list for drunkenness, showing annual rates of 2228·8, 1643·8, and 1012·9 respectively. But in the scale of alcoholism Durham and South Wales rank very low, Durham, far and away the most drunken county in England, being in the fourteenth, and South Wales in the fourth place from the bottom. Northumberland appears to be an exception, and ranks high under all heads, but it is really an exception which proves the rule, for its anomalous position is entirely due to the dominant influence of Newcastle, which contains over 37 *per cent.* of the population of the county, and which, as a seaport, presents quite different industrial conditions. If New-

castle be excluded, the rate of drunkenness still remains at 1384·8 per 100,000, but the rate of suicidal attempts falls to 3·30, which is but little above the ordinary level in mining districts.

It is, therefore, evident from these figures that not only do drunkenness and alcoholism not coincide in distribution, but there is even a tendency for the maximum of drunkenness to occur with the minimum of alcoholism. A clearer view of the facts is gained when, instead of the counties with their mixed industrial conditions, we take composite areas formed by uniting districts where these conditions are similar. For this purpose we may adopt the selection made in the criminal statistics, where the representative regional groups are made up as follows :—

Agricultural counties (county police districts only).—Norfolk, Suffolk, Hunts, Cambridge, Dorset, Hants, Somerset, Wilts.

Manufacturing towns.—Birmingham, Blackburn, Bradford, Derby, Halifax, Hanley, Huddersfield, Leeds, Leicester, Nottingham, Oldham, Preston, Sheffield, Wolverhampton.

Seaports.—Birkenhead, Cardiff, Hull, Liverpool, Newcastle-on-Tyne, Newport (Mon.), Southampton, South Shields, Swansea, Tynemouth.

Mining counties.—Derbyshire (excluding Derby borough), Durham (excluding Hartlepool, South Shields, and Sunderland), Glamorgan (excluding Cardiff and Swansea), Monmouth (excluding Newport), Northumberland (excluding Newcastle and Tynemouth).

In this part of our analysis, as has been already stated, mortality statistics fail us, so that we have to fall back on the rate of suicidal attempts as our index of chronic alcoholism. We can, however, utilise the mortality returns in an indirect way to test the accuracy of this index in its present application, by comparing the incidence of suicidal attempts in the several composite areas with the death rates from alcoholism in the corresponding occupational groups. This method works well where the regional group has a close equivalent in a single occupational group, as is the case with the agricultural and mining districts. But it is naturally of less value in dealing with the manufacturing towns, and *à fortiori* with the seaports, where the more complex conditions do not admit of being approximately represented by one definite industrial class. In these latter cases, therefore, it is only possible to make a partial application of the method by singling out such of the

occupational groups as may seem most characteristic of the special industrial conditions in each area, *e.g.* in the manufacturing towns the great groups of the textile and metal workers, in the seaports, the dockers.

Table II, then, shows the rate per 100,000 of the mean intercensal population of (a) arrests for drunkenness, and (b) attempts to commit suicide, in the several composite groups formed as above. And, as a check on our assumption that the incidence of the second phenomenon corresponds with that of chronic alcoholism, Table III, which should be read with Table II, gives the comparative mortality figures from chronic alcoholism alone, and from chronic alcoholism and diseases of the liver taken together, in the chief occupational groups according to the census of 1891; the figures are practically the same in the earlier returns. A diagram shows the substance of the tables in graphic form.

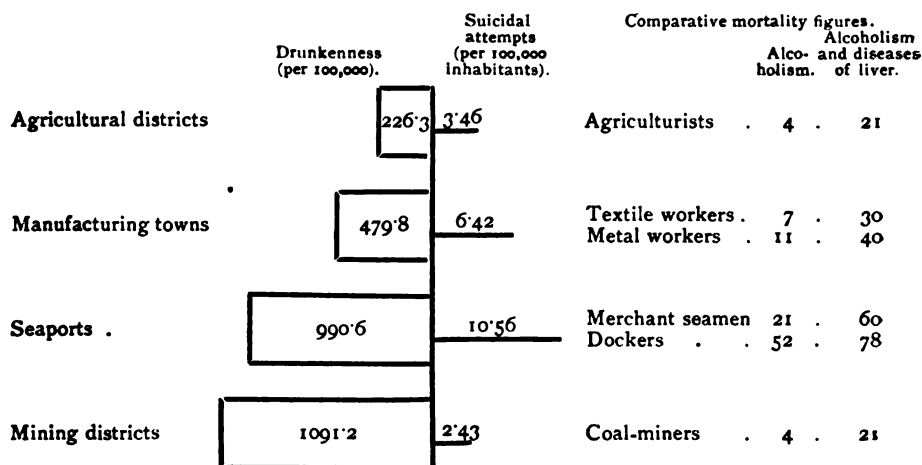
TABLE II.—*Prosecutions for Drunkenness and Suicidal Attempts in Composite Areas of Special Industrial Character (Annual Average per 100,000 of Estimated Population during the Years 1891—1900).*

	Drunkenness.	Suicidal attempts.
Agricultural counties	226'3	3'46
Manufacturing towns	479'8	6'42
Seaports	990'6	10'56
Mining counties	1091'2	2'43

TABLE III.—*Comparative Mortality Rates from (a) Alcoholism and (b) Alcoholism and Liver Diseases taken together, in the Larger Occupational Groups (Census of 1891).*

	Alcoholism.	Alcoholism and liver disease.
Agriculturists	4	21
Coal-miners	4	21
Railway engine-drivers, etc.	4	22
Textile manufacturers	7	30
Quarries, etc.	8	23
Shoemakers	9	29
Railway labourers	10	27
Metal workers	11	40
Bakers	11	50
Tailors	12	43
Shopkeepers	14	43
Messengers, porters, etc.	15	31
Carmen, carriers	17	44
Merchant seamen	21	60
Coach and cab service	28	61
Butchers	35	91
Dockers	52	78
Publicans, etc.	94	268

Diagram showing the Relation of Drunkenness and Alcoholism in the Composite Areas representing Special Industrial Conditions.



Examining these tables, then, we find that they repeat, but in a clearer and more definite way, the results suggested by our comparison of drunkenness and alcoholism in the counties. More particularly they confirm the view that these two phenomena are in a very large measure independent. Thus it will be noted that while the agricultural and mining districts present respectively the minimum and the maximum development of drunkenness, they nevertheless appear practically equal in regard of alcoholism, from which both are relatively free: in both, in fact, the rate of suicidal attempts is very low, and the comparative mortality figures from alcoholism of coal-miners and of agriculturists is the same, and is lower than that of any other industrial group.

Now we can most clearly interpret these results by taking as our guide the distinction already pointed out between the two fundamental types of drinking. In the agricultural districts the conditions of life do not specially favour either luxury or misery drinking: though the labour is badly paid and arduous, it is done in the open air, does not demand sudden spurts, does not involve the bad hygienic surroundings that beset the slum-dweller of the towns; therefore there is relatively little industrial drinking. On the other hand, there is small margin for convivial excess. Naturally the relative remoteness of the public-

house in a thin and scattered population discourages both forms of drinking. Under these circumstances, therefore, we find that in the agricultural counties drunkenness and chronic alcoholism, as measured by suicidal attempts, are both rare, and the death-rate of agriculturists from alcoholism and from liver disease is a minimum.

In the mining districts we have to do with a well-organised, well-paid form of labour: wages are high, employment tolerably steady, hours of work relatively short, hygienic conditions fairly good, and—a most important matter—there is little female labour, so that the women are able to look after the feeding and home comforts of the family. All the circumstances, therefore, are against misery drinking. On the other hand, this relative well-being in a population of low culture is certain to produce convivial excess. In these mining districts, accordingly, we see an enormous development of drunkenness, greater indeed than is reached in any other part of the country. But, on the other hand, we find a minimum of chronic alcoholism: the mortality of coal-miners from alcoholism alone and from alcoholism and liver disease together is the same as that of agriculturists, and the rate of attempted suicide is even lower than that in the agricultural districts.

In the manufacturing towns we have to do with conditions of labour which are necessarily very mixed, but which, taken in the average, compare unfavourably with those in the mining districts. In most of the trades the workers are less well organised, hours of labour are longer, the hygienic conditions during work and in the homes of the workers are inferior, and there is a large amount of female labour with its attendant disorganisation of family life. All this makes for industrial drinking; and, partly from the same reasons as in the mining districts, and partly because misery drinking necessarily leads to a secondary development of luxury drinking, the convivial form is also well marked. In these towns, therefore, we find a rate of drunkenness which is fairly high, though still less than half that in the mining districts, and we find a rate of attempted suicide which is very high, nearly three times that in the mining counties, and correspondingly we find that the comparative mortality figures for alcoholism in such large groups, for instance, as the textile workers and the metal workers, are respectively nearly two and three times as high as in the group of coal-miners.

Finally, when we come to the seaports we have to deal with the least favourable conditions of labour. Besides the merchant seamen, whose mode of life and traditions do not make for temperance, there is in these towns a large infusion of unskilled casual workers whose occupation demands sudden spurts of muscular effort, whose housing conditions are bad, whose pay is low, whose work is irregular, and at times excessively prolonged. Moreover, there are no restrictions on the constant drinking of this class of labourer, such as the employer imposes during working hours on men who have to do with machinery. Further, the seaports have a large element of women engaged in prostitution, a form of industry which strongly tends to misery drinking. In the seaport towns, accordingly, while drunkenness, though very rife, is still a little below the level of the prosperous mining districts, chronic alcoholism, as indicated by the frequency of suicidal attempts, reaches an enormous development. The occupational death-rates are of less use to us here, as there are fewer groups which can be taken as specially representative of seaport life; two such groups, however, there are, namely the merchant seamen and the dockers, and both rank high in the alcoholic scale, the latter indeed showing a death-rate from alcoholism which is surpassed only by the liquor trade group. Of course, it may be objected that dock labour and similar forms of unskilled work are the refuge of the unfit, and that therefore some proportion of the men who drift into this sort of life do so because of drunken habits acquired elsewhere, or because they are of the shiftless and incompetent type who readily become drunkards. And this objection undoubtedly contains part of the truth. None the less the analogy from the rise of alcoholism with the deterioration of industrial conditions in the various groups of skilled labour suggests very strongly that a similar agency is responsible, to some extent at all events, for the continued rise in these classes of unskilled labour.

The divergence between chronic alcoholism and drunkenness which is so striking in the regional distribution of these phenomena, is for obvious reasons less apparent in their periodic variations. It is, however, traceable at times in a want of correspondence between the movement of drunkenness and the movement of other social facts which are known to be more or less importantly related to alcoholism. An interesting instance

of this sort is pointed out by Sir John Macdonnell in his admirable introduction to the Criminal Statistics of 1899. He observes that though the year was a record one for drunkenness, the prosecutions for that offence being 15 *per cent.* higher than in the preceding quinquennial period, "there was at the same time a decrease in crimes of violence and other offences which might be supposed to be intimately connected with drunkenness." "It was," he further remarks, "a year of great prosperity; a year in which failures were the fewest during the previous decade; in which the Revenue showed a large surplus; in which wages advanced, and in which there were exceptionally few strikes." "On the whole," he adds, "it would appear that for the present drunkenness is apt to be a concomitant of high wages and good trade." We may probably infer from these facts that it was at all events in part because the increased drunkenness of 1899 was mainly due to luxury drinking that it did not lead to an increase in homicidal crime, which is on the whole more dependent on the chronic intoxication.

It is, of course, chiefly in its bearing on the question of prevention that this view of the social causes of alcoholism has most practical interest. The distinction between convivial and industrial drinking being essentially one of origin, it obviously implies a corresponding difference in the methods suited to deal with either form.

Primary convivial excess is, in the first place, very much more curable; it belongs to the effervescent time of life, and not uncommonly subsides spontaneously with maturer years; its age-curve approximates pretty closely to that of other expressions of the expansive tendency, such as crimes of acquisitiveness. Its prevalence depends, too, in a large measure on social ideals and customs, and therefore changes with the degree of culture and can be modified by educational and religious influences. The sobriety of the educated classes in this country at the present day as compared with their drunkenness in the eighteenth century is a familiar example of such a progress in manners.

With industrial drinking it is entirely different. So far from having any tendency to spontaneous arrest, it is usually aggravated by advancing age. And not only is it not amenable to the moral and educational influences that can control luxury

drinking, but, when brought into previously sober communities, it weakens or destroys the efficacy of such influences, so that *pari passu* with the spread of chronic alcoholism and its usual results, there comes also a growth of convivial excess. Thus, for instance, in Northern Italy⁽²⁾ and in parts of Spain⁽³⁾ within recent years, the introduction of industrialism has been accompanied by a rapid development of alcoholism, an increase in alcoholic insanity and alcoholic crime, and in drunkenness, in strong contrast with the traditional sobriety of the nations of the Latin culture.

The consideration of such facts as these may perhaps be useful in preventing exaggerated estimates of the possible effects of "drink cures," medical or legal, on the alcoholism of a nation.

Summary.—In conclusion we may sum up the results of our inquiry in the following propositions:—

1. In considering the social causes of intemperance, which are by far the most important, it is necessary to distinguish two opposed types of drinking, *viz.* the drinking that goes with conditions of relative luxury, and finds its most frequent expression in ordinary convivial drinking, and the drinking that goes with conditions of relative misery, of which bad industrial circumstances are the most considerable factor.

2. Convivial drinking may, and often does lead to drunkenness, but, at least in its pure form, does not tend very much to chronic alcoholism. Industrial drinking, on the other hand, while leading also, though less immediately, to drunkenness, tends rapidly and fatally to chronic intoxication.

3. From a statistical point of view, therefore, while chronic alcoholism always implies the existence of drunkenness, drunkenness by no means implies the existence of chronic alcoholism. In England this divergence between the two phenomena is best seen in the prosperous mining districts, which by reason of their prosperity are at once more drunken, but less alcoholic, than any other part of the country.

4. The graver social evils that are in any important degree caused by alcohol are related to the chronic intoxication, and are, therefore, mainly due to industrial drinking.

5. While educational, religious, and similar influences can control the excesses of convivial drinking, they have but little action on industrial alcoholism, which can only be checked by

raising the standard of living, and, in a minor degree, by such methods as restricting the facilities for obtaining alcohol during work hours, providing hygienic substitutes, and so forth.

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3. Jimeno y Azcuarte, *La Criminalidad en Asturias*, Oviedo, 1900.

DISCUSSION

At the Quarterly Meeting in London, May 18th, 1904.

The PRESIDENT remarked that Dr. Sullivan had made a very interesting contribution, and he was sure there were several members present who would wish to discuss the paper.

Dr. STEWART (Clifton) said there was no doubt that the general public had for many years been in the habit of confounding the two terms drunkenness and inebriety, and the Society should set its face against this practice. A large number of cases of drunkenness were looked upon as cases of disease, and so labelled, and afterwards, when the drunkards gave up their vicious habits, they were spoken of as having been cured of the disease. This was a dangerous thing; it was dangerous to lead people to believe that those who were diseased had been cured by, for instance, the gold cure, or atropine, or any other drug; the fact being that those who were cured were instances not of inebriety, but of drunkenness—people who had a pernicious habit of drinking, but whose habit had not produced that pathological condition which he would be glad to find every medical man associating with the term inebriety. He asserted that people might go on for years as drunkards and yet not have the brain disease which was the only thing to justify one in speaking of such persons as inebriates. With regard to the author's classification into luxury drinking and misery drinking, he thought that a very happy nomenclature, and that it would help one very often to account for many cases which came under one's notice. He (Dr. Stewart) had tabulated a list of 200 cases of inebriety which he had had under care, and found that 124 of those 200 had been due to misery. He thought the reason was that a large proportion of his cases had occurred in ladies. He considered there was more disappointment amongst women than amongst men, in regard to certain circumstances in life. Women did not like to show their trouble, and therefore took something which would assist them in concealing it. The Society was under a deep obligation to the writer of the paper for the manner in which he had presented a number of interesting facts.

Dr. MERCIER said he rose not so much to criticise the paper, which afforded a very great deal of material for remark, as to offer a practical suggestion. A paper such as that, which contained so much food for reflection, could not be adequately discussed after merely hearing it read, and if the papers brought before the Society could be circulated in proof before being read, so that members might have the opportunity of preparing their criticisms, the debates would have more value than they at present possessed. He, like Dr. Stewart, had been much interested in the distinction drawn by the author between "luxury drinking" and "misery drinking." He was not prepared at the moment to either agree or disagree with it; but if it were a true distinction it must profoundly affect all one's thinking about alcohol in future, and must modify one's notions, both as to the cause and as to the remedy of the condition.

Dr. HAYES NEWINGTON said there was one causal factor in alcoholism which appeared never to be considered when those matters were discussed. People were

very apt to go off to the social, moral, and psychological aspects, and altogether forget to speak of the quality of the material which was put into the body. Attention should be bestowed on the vile stuff which was imbibed by people, some of whom possibly would not be drunkards if they had good instead of bad liquor. He did not see how alcoholism could be discussed adequately without taking that into consideration. It seemed to his mind nonsense to talk about restricting the number of licensed houses and imposing parliamentary limits so long as men were unrestrictedly allowed to go on poisoning his Majesty's *lieges*. One had only to refer to the *British Medical Journal* of a few months ago to find that merely a percentage of distillers relied on malt altogether for the manufacture of whisky, and that the greater part of the stuff sold as whisky was silent or patent spirit. How could people go on putting fiery stuff into their vessels without suffering some material damage? Was there any other way in which people were allowed to poison themselves without any consideration of the mischief which was thus being wrought? Turning to the evidence which was given at Marlborough Street a few weeks ago, it was stated that there was no test for brandy, and that seemed to be the case with beer and other liquids. It was said that a standard test of beer could not be made, but one would think that some of the analytical chemists would have been bold enough to advise what material should not be found in liquors. Some years ago, when the Association considered the question of making reports on various subjects, and especially statistics on alcoholism, he suggested there might be something instructive in the comparison between districts where the people drank beer and those in which the chief stimulant or beverage was spirits. Obviously there must be a considerable difference between the mental condition of a man who for years fuddled himself every day of the week with small beer, and the man who got furiously drunk every day of the week with a strong and noxious poison. His object in rising was merely to suggest that the matters he had referred to must be taken into consideration when weighing the material parts of Dr. Sullivan's valuable paper.

Dr. DAVID YELLOWLEES said he had listened to Dr. Sullivan's paper with very great interest and appreciation. He appreciated the distinction between convivial drinking and misery drinking, but it by no means covered the ground. There was certainly a large class of drinkers who did not need the excuse of conviviality, and had not the excuse of misery, but who drank because they liked to drink. One point on which he desired to have a clearer definition was the term which was used so frequently in the paper—"Chronic alcoholism." What did that mean? With most students of the subject, he thought it had come to mean chronic alcoholic degeneration of the organism, the brain included. But evidently that was not the sense in which it was used in the paper, and it should be stated in what sense the term was used. If the writer meant by it simply habitual and constant indulgence, let it be so understood. Convivial drinking happened in different classes of people, and at different periods of life, and was not so apt to lead to ruinous drinking; misery drinking happened at a time of life when the misery still remaining, the drinking went on. Alcoholic suicide associated with chronic alcoholic degeneration was, he thought, rare; but there was a form of chronic alcoholism in which suicide was common. He was sure a definition of terms was necessary before one could appreciate the paper as it deserved. He had listened to it with great pleasure, and would be glad to see it in print.

Dr. G. F. BLANDFORD said that there was a great deal in what Dr. Yellowlees had said as to the necessity of the terms used being more strictly defined. He thought there were a number of chronic alcoholics who did not always drink, who had periodical bouts of drinking, and who between those bouts drank but very little. Those, he considered, were quite distinct from convivial drunkards, and those who, as Dr. Yellowlees said, drank because they liked it. But he thought they were a much more serious form even than continual drinkers, and much more difficult to cure. He added that carefully compiled statistics of the various types would prove valuable.

Dr. BRANTHWAITE remarked that the point which had already been mentioned affected a large part of Dr. Sullivan's paper, namely, the distinction between drunkenness and chronic alcoholism. He had had something like twenty-two years' experience, and during that time he had done nothing but treat drunkenness, and at the present time he had two or three thousand patients under care. But he

did not yet know which was a drunkard and which was a chronic alcoholic. Perhaps Dr. Sullivan would tell him in his reply.

Dr. GEORGE H. SAVAGE said he quite realised that statistics had to be met by statistics, and he had no statistics to offer. Undoubtedly knowledge increased by the collection of statistics, even though it was said that statistics could be turned to any use. One of the most important things which had been ventilated in the discussion was that by Dr. Hayes Newington, that the classes of cases could not be compared unless one knew the composition of the liquids which were being imbibed. He had recently spent three weeks in Italy, where he saw a great deal of wine-drinking, but during those three weeks he did not see one man really drunk. Yet he believed a very great deal of brain disease and mental disorder generally were produced by the drink they took. It was very important, as previous speakers had said, to be exact in definitions of drunkenness, inebriety, and chronic alcoholism. There was drink as a symptom, and drink as a cause, and there was drink as both symptom and cause. But the cases which mostly came under the notice of alienists were the recurrent ones. They might be sometimes classified with misery drinkers when the period of depression was associated with the period of drink, but such persons did not drink because they were miserable, but because it was a stage of the mental disorder through which they were passing.

Dr. ROBERT JONES wished to join in thanking Dr. Sullivan for his extremely suggestive paper. One of the most interesting questions was, Why do people drink? Dr. Sullivan had classified them into a misery and a convivial class, but he (Dr. Jones) thought it was the same cause in both, always some cause which made the heart of man glad and tended to kindle a better feeling than he had been experiencing before. He regarded the classification of misery and convivial drinking as somewhat artificial, for the miserable man wanted to change his emotional *status*, and so did the convivial man. There was no doubt that the intervals in the police cell tended to make the chronic drinker a periodic one, and also perhaps prevented his becoming a chronic alcoholic. He (Dr. Jones) thought restrictive legislation was very important in the matter of controlling drunkenness; he believed we could make both man and woman sober by Act of Parliament, as witnessed by the results of the Sunday Closing Act in Wales. It was, however, too late to raise new points.

Dr. SULLIVAN, in reply, said—The chief criticisms to which I have to reply refer to terms and definitions, and more particularly to my use of the terms chronic alcoholism and drunkenness. These criticisms, I venture to think, are based on a certain misconception, due, no doubt, to my too rapid reading. This is a statistical paper, and therefore I have had to take the terms and facts as I found them; I have no responsibility for the choice of the terms and no authority to define them otherwise than according to their plain sense. Thus "chronic alcoholism" is a heading used in the mortality returns of the Registrar-General, and "drunkenness" a heading used in the Criminal Statistics. I imagine that what is present in the mind of most persons who register deaths as due to chronic alcoholism is the chronic alcoholic degeneration of which Dr. Yellowlees speaks—contrary to Dr. Yellowlees' impression it is certainly what I mean when I use the term on my own responsibility. But be that as it may there can be no doubt that by the registration of deaths under this rubric it is at least meant to convey that the individuals died of alcohol, so that these figures plainly express the drinking that leads to the cemetery; just as "drunkenness," the heading in the Criminal Statistics, expresses the drinking that leads to the police cells. And the whole point of my paper is that these two sorts of drinking are so different that in this country where you have most of the latter you have least of the former. The distinction, therefore, between drunkenness and alcoholism is not, as Dr. Branthwaite supposes, a distinction invented by me; it is a bald statement of fact. The question of the relation of suicide to chronic alcoholism is too large a matter to go into now; but I may venture to point out that Dr. Yellowlees' opinion is, I think, rather at variance with general experience. The very inventor of the term chronic alcoholism, Magnus Huss, repeatedly mentions suicidal tendency as a specially frequent symptom in these cases; and most other writers on the question have agreed with him. Personally, I hardly know half-a-dozen "Black-Listers"—at least of the Black-Listers who are really chronic alcoholics—who have not made one or more automatic suicidal attempts in their career.

Traumatism and General Paralysis. — A Discussion opened ⁽¹⁾ by JAMES MIDDLEMASS, M.D., Medical Superintendent, Sunderland Borough Asylum.

WHEN, at the secretary's invitation, I suggested "Traumatism in Relation to General Paralysis" as a subject for discussion to-day, I was influenced in doing so by the fact that recently I had had some cases in which this question was a very important one. This importance was due to there being the necessity to decide whether or not the patient was entitled to compensation for injury under the Workmen's Compensation Act.

The points to be set before you and on which an expression of opinion is desired, may best be understood by giving a short account of one of the cases. The patient, a man æt. 46, was a shipyard labourer. In the summer of 1901, he, in the course of his employment, had occasion to go up a ladder. When he had got about three or four feet from the ground, he missed his footing and fell down. He did not fall on his head, but sustained a slight sprain of one ankle and a few small bruises on the back. He was a little shaken but was able to get up, to give an account of what happened, and to walk home. He was, however, unable to go to work next day, owing to pain in his ankle, and as a matter of fact he never went to work again. In a few days his injuries were nearly well, but a week after the accident he began to suffer from severe headache, with twitchings of the eyelids and lachrymation. The headache persisted, and the muscular twitchings spread to the lips and tongue. The headache still continued to be severe, and some time later his mind showed signs of becoming affected. He got steadily worse, both physically and mentally, until he had to be sent to the asylum, about a year after the accident, in June, 1902. On admission he had well-marked physical signs of general paralysis, and mentally he showed evidence of the demented form of that disease. He got steadily worse and died in January, 1903. At the *post-mortem* examination, the brain presented the typical lesions of general paralysis, and neither to the naked eye nor under the microscope was there any evidence of traumatism of the brain or skull.

He had for over fifteen months received a weekly allowance

as compensation for the accident, but after asking my opinion this was withdrawn. The man's relations, backed by the relieving officer, took steps to bring an action to have the matter tested legally, but in the meantime the patient died, and the action was dropped.

The reasons which influenced me in giving the opinion that the disease was not due to the accident, were (1) that the accident was comparatively slight; (2) that there was no disturbance of consciousness, nor any other symptom that the brain had been directly injured; (3) that the symptoms of general paralysis made their appearance in a pronounced form only a week after the accident. He was said to have been quite healthy before the accident, but it is open to question whether a skilled person would not have been able to detect some evidence of brain disease had he been carefully examined. It should also be mentioned that there was very strong presumption amounting almost to positive proof that the man had suffered from syphilis. The condition of the aorta and cerebral vessels at the *post-mortem* examination confirmed this view. Even though the general paralysis were an immediate result of the accident, it is a question as to how far the previous existence of syphilis would absolve the employers from liability. Presumably they would not have been liable had the man been drunk.

I have not been able to ascertain that there is any work or paper in which these points are either authoritatively or exhaustively discussed, and it is with the view of obtaining this that I have ventured to place them before you for discussion.

Dr. GILMOUR followed with details of an interesting case in which general paralysis appeared to follow a blow upon the head, but *post mortem* there was found that there had been a fracture of the base.

Dr. POPE was glad Dr. Middlemass had brought forward this discussion, as it was a matter which had come under his observation, owing to the frequency with which traumata are given as the exciting cause of cases which ultimately turn out to be general paralysis, at his asylum. He was unable to accept as proved that all general paralysis is syphilitic in origin, as he had treated a considerable number of cases in which all the external evidences were in a contrary direction, though he was bound to admit that a syphilitic history was very common.

Dr. JOHNSTONE (Ilkley) regretted the title of Dr. Middlemass's paper had not been "Latent General Paralysis of the Insane excited or rapidly evolved by a Trauma." In the minds of those who had given much consideration to the subject, syphilis was the chief etiological factor in the vast majority, if not all cases of general paralysis of the insane.

The syphilitic virus manifested itself chiefly on the central nervous structures, the skin, and those mucous surfaces continuous with the skin, the reason being that those structures owed their development to the same primary embryonic layer, *vis.* the epiblast.

Many cases of syphilis caused very mild or slight skin troubles, and received little or no specific treatment ; but these were the cases in which, in after life, the central nervous structures received the full virulence of the poison, giving rise to locomotor ataxy, general paralysis, brain syphilis, etc. The length of time from the original infection—in many cases entirely forgotten—and the onset of nervous symptoms doubtless caused the delay in their connection being discovered.

Any severe shock or physical accident occurring either directly or indirectly to the central nervous system will, undoubtedly, expedite the development of any latent predisposition, and this is not confined solely to general paralysis of the insane.

For example, I have seen a diagnosis of locomotor ataxy only established after a severe bicycle accident had happened to a *quondam* experienced rider.

Dr. MERSON (Hull).—I see a good many cases of general paralysis, and my experience is that very often some injury is assigned as the cause, when inquiry into the history brings out evidence of the previous existence of the disease, and one has no difficulty in saying that the accident was a consequence of the patient's clumsiness. In some cases, however, without evidence of previous illness, the symptoms set in immediately after an injury and apparently in consequence of it. In such a case where the question of compensation arises, I do not think we should be justified in giving a decided opinion against the claim, even if we think that no injury can of itself set up general paralysis without the previous existence of some altered state of brain, the consequence of syphilitic or other poisoning. Such a condition of brain may have been

present, and yet the symptoms might not have shown themselves at the time, or might even have remained quiescent for an indefinite period, but for the occurrence of the injury. In these circumstances, I think a patient would be entitled to reasonable compensation.

Dr. EDDISON suggested that future compilers of statistics would probably be puzzled at the sudden increase of the number of cases of traumatic general paralysis unless they happened to note the fact of the passing of the Employers' Liability Bill about the same time. This seemed another illustration of possible injustice. He had never seen a case of general paralysis brought on by any injury; but it would be unscientific to say it could not happen. The immense majority of cases of general paralysis seem to happen in persons who have had syphilis; and it is not improbable that a shock of any kind happening to a nervous system already affected by syphilis might develop an attack of general paralysis; and a fall from a ladder might possibly be the immediate "cause" in that sense. He remembered hearing a judge say that it was no defence for a railway company to show that a sufferer was "nervous" or "hysterical" before an accident if the accident caused something more; the company must take care not to injure such people. The moral of these cases seem to be that employers of labour must take care not to injure such people—or else not to employ them. He thought very little attention need be paid to statements as to perfect health up to the time of an accident. In all such cases some particular event was nearly always given quite honestly as the beginning and cause: the early symptoms having been quite overlooked.

Dr. EURICH supported the statement that syphilis preceded general paralysis of the insane in almost all cases occurring among the upper classes. Traumatism could determine the outbreak of ordinary manifestations of syphilis, and was probably instrumental in determining the outbreak of general paralysis of the insane in some few cases. Still it was difficult to see how an injury to the head could bring about the changes so frequently found in the posterior columns of the cord. So far as compensation under the Act was concerned, two questions must be kept separate from each other: (1) The scientific question as to the exact *role* played by traumatism in the

genesis of general paralysis of the insane ; and (2) the question of compensation. So long as we are agreed that injury can hasten or aggravate already existing general paralysis, then the victim is entitled to compensation, from which antecedent syphilis should not debar him.

(¹) At the Northern and Midland Divisional Meeting, April 7th, 1904.

General Paralysis and Crime. By JOHN BAKER, M.D.,
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BEFORE the invasion of established general paralysis there is a prodromal stage, which ranges within wide limits as to its scope and duration. The clinical manifestations are many and various, and are symptomatic of either a rapid, or of a slow and insidious disintegration of the intellectual, moral, and affective life. Of all the prodromata, failure and decay of the moral sense are the most important, and are exemplified by acts of omission and commission against law, order, and propriety. The disease attacks all classes, and as the friends cannot nicely discriminate the changes in character, and are apt to look upon them as temporary aberrations, the disturbance to the social fabric caused by these sporadic displays of moral perversion is not inconsiderable. The nature and extent of the disharmony and distress occasioned by these moral lapses depend largely on the social standing, occupation, and opportunities of the diseased individual, and desolate homes, widespread ruin, and unenviable publicity often follow in the train of the predominant imaginative conceptions. The larger ambition may lead to wild speculation, the bolder schemes to fraud. Sobriety is turned into drunkenness, and sexual excitement may result in rape and acts of indecency. If thwarted or opposed, destructiveness or violence may ensue, but in this direction serious consequences are comparatively seldom associated with the expansive prodromata. The budding paralytic of this type is rarely vindictive ; although easily roused to anger, he is easily calmed.

Being, in his own estimation, so superior mentally and physically to his fellow-men, he can afford to pity and forgive.

Instead, however, of overweening vanity, there may be despondency, worry, and a gloomy forecast. This condition of emotional depression may increase and appear later as the melancholic or hypochondriacal form of general paralysis, undoubtedly the most important from a medico-legal point of view, as it is in the early period of this form of parietic dementia that the graver crimes seem to be committed. On the other hand, there are cases which pass into a state of facile, contented dementia without any marked degree of antecedent excitement or depression. This class is prone to commit petty acts of theft unaccompanied by any attempt at artifice or precaution.

Again, the invasion of the developed disease may be signalised by an acute attack of mental excitement or other form of mental disorder, or by a protracted period of persecutory delusional insanity. In these states of mental disorder homicidal offences may occur. Whatever the nature of the prodromata, in a general sense, they may be said to colour the later symptoms.

The literature on the connection between general paralysis and crime does not appear to be bulky. Dr. Sullivan, of Pentonville Prison, in an interesting article of recent date, has ably summarised the prevailing opinions on the subject, more especially those of foreign observers. I cannot profess to be able to add much to the stock of knowledge already existing, but it may not be altogether unprofitable to place on record some of the more important cases in which serious crime has been committed by general paralytics in this country. Since the opening of this asylum forty-one years ago 62 cases have been admitted, *viz.* 54 men and 8 women, being 3 *per cent.* of the male admissions and 1·2 *per cent.* of the female admissions. The return of the Lunacy Commissioners for the years 1899 and 1900 indicates that the proportion amongst ordinary lunatics is 10·7 *per cent.* for males and 2·2 *per cent.* for females. The cases admitted into this asylum, either on reception, or after a shorter or longer period of detention, manifested the clinical symptoms, mental and physical, associated with the disease; and in all, with the exception of one man still living, the brain and membranes presented in greater or lesser degree the characteristic pathological lesions.

The following table shows the nature of the crimes and offences :

	Males.		Females.		Total.	
1. Crimes of violence against the person :						
(a) Homicidal offences :						
Murder	9				9	
Attempted murder	6				6	
(Aggravated assault)	1				1	
		16				16
(b) Sexual offences :						
Assault with intent to rape	3				3	
Carnally knowing	1				1	
		4				4
2. Offences against property :						
Arson	7				7	
Larceny, burglary, etc.	27		8		35	
		34		8		42
		54		8		62

In all the murder cases, and in all but two of the homicidal attempts, the patients were found insane, either before or at trial. The offences against property were, in the majority of instances, committed by habitual criminals, conviction followed, and the disease subsequently appeared during their incarceration in the convict prisons, whence they were transferred to Broadmoor. Apart from this class, the general paralytics who commit petty thefts are not sent to this asylum, but are dealt with otherwise, therefore no useful comparison can be instituted from the above figures as to the incidence of criminality among general paralytics as a whole. First in importance come the homicidal cases. To attempt a description of all would be tedious, and tend to overloading. It is, therefore, my intention to group them, as far as possible, according to their clinical features, at the same time indicating the period of the disease at which the criminal acts occurred ; further, to outline in brief detail a few cases representative of the various groups, and to endeavour to trace the relationship of the criminality to the insanity.

Invasion Period of Persecutory Delusional Insanity followed by Exaltation, Paresis, and Paralytic Dementia ; three attempted murders in invasion stage.

CASE 1.—Law clerk, æt. 34, single, tried for feloniously shooting with intent to murder. Insane on arraignment. Delusions of persecution that persons followed him and exercised an injurious influence over him, poisoned his food, etc. On admission, restless, delusions as above, has dreadful sensations, feels he must injure someone. Later, hypochondriacal delusions appeared, *viz.* that his rectum is stitched up by persons who enter his room at night. Often shouts to be delivered from his enemies ; at other times weeps, says he is dying, and sits with his hands in his pockets, in an attitude of deep dejection. Next came loss of weight, fibrillar tremor, embarrassed speech, and exalted ideas : says he is the son of God. Subsequently noisy and incoherent, becoming feebler in body and mind, with verbigeration, constantly repeating : “ One hundred million pounds.” Loss of control of sphincters, inability to swallow, and death six years after crime.

The other two cases included in this group were those of men who attempted to murder their wives, under the delusion that they were unfaithful, and were endeavouring to get rid of them by poisoning their food. The sequence of symptoms was somewhat similar, only the hypochondriacal delusions were absent, and persecutory delusions prominent. In one of the cases persecutory delusions alternated with the exalted ideas.

Were these cases of persecutory paranoia followed by general paralysis, or were they cases in which the somatic signs of the disease had lagged behind, only to show themselves indubitably at last ? I incline to the belief that the latter view is the correct one. Mouravesik, discussing the question of the alteration in the type of general paralysis during late years, says he thinks that now the initial symptoms of the disease are more liable to be confounded with other forms of insanity, especially paranoia, while the special symptoms of the malady at a later date become more accentuated. In view of the cardinal fact that the disease is characterised by a progressive dementia, it is usually stated that the delusions, all along the line, are fickle and unsystematised, and that, when

insanity of thought results in insanity of action, such action is ill-regulated, ill-directed, and not persisted in. Doubtless this is the case in the fully-developed disease, when the degeneration of the neurons has advanced, but it seems to me that, in the early stages, when the toxins have not progressed far in their deadly work, the delusions are sufficiently fixed and systematised as to cause resolute and purposive homicidal acts, not only in this variety, but also in the melancholic forms next to be considered. Dupré, in treating of self-accusation in the insane, states that in dementia of organic, senile, and paralytic origin, ideas of self-accusation are met with, such ideas being mobile, diffusive, incoherent, and contradictory, but sometimes, and especially in the early stages of general paralysis, they present a more permanent appearance.

Invasion Period of Delusional Melancholia, with Auditory Hallucinations, followed by Rapid Paralytic Dementia, without Exaltation; three murders in invasion stage.

CASE 1.—Soldier, with twenty-one years' service, æt. 41, married, history of syphilis, grandmother and sister insane. Tried for murder of child (son); insane on arraignment. Had been depressed for some time before crime, and had made one attempt at suicide. Heard a voice repeatedly urging him to kill the child, and finally obeyed by cutting its throat. On admission, a tall, heavily-built man, with dull, expressionless countenance, apathetic and melancholic. Later, restless, sleepless, incoherent, epileptiform convulsions, rapid paralytic dementia, loss of control of sphincters, loss of power of articulation and deglutition. Died seven months after crime.

CASE 2.—Traveller, æt. 57, widower. Murder of daughter, æt. 7 years—certified insane whilst awaiting trial. Always eccentric, sustained great business losses, became very depressed, heard voices telling him it would be better if he and all belonging to him were dead, afraid the child would grow up and lead a fast life, perhaps be killed by "Jack the Ripper," constant grinding noise in head for three months before crime. Police found him sitting by fireside in a dejected attitude, and the child lying in bed in the same room, with its throat cut. When charged, he said: "I cut the child's throat

with a razor." On admission : very depressed, verbigeration, constantly repeating, "Oh, despair, despair ; God will take care of me." Gait soon became feeble and tottering, dementia, epileptiform convulsions, and death, five months after crime.

CASE 3.—Collier, formerly soldier, æt. 36, married, history of syphilis and head injury. Murdered infant daughter—guilty, but insane. Had been discharged from an asylum several months previously. Borrowed a cobbler's knife from a neighbour, entered his own house, placed child across his knees, and cut its throat. Returned knife to neighbour immediately afterwards, remarking, "I have killed my daughter Laura." Hypochondriacal delusions on admission, followed by usual symptoms of general paralysis, without exaltation ; dementia, epileptiform convulsions, and death fifteen months after crime.

Here are three determined murders. There is no attempt at evasion, no equivocation, no contradictory answers. An intense melancholia, accompanied by auditory hallucinations of a compelling character is followed (in two cases) by an intense and rapidly fatal form of general paralysis. A somewhat analogous case (non-homicidal) is related by Hobhouse, where the paralytic symptoms were preceded by a period of depression, lasting nine months, during which an attempt at suicide was made ; the paralytic symptoms, when they did appear, made extraordinarily quick progress, the total duration of the illness being fourteen months. Voisin has observed that in these melancholic cases the disease is not suspected at first, but, when discovered, runs a rapid course. With regard to the hallucinations, Dr. Renè Semelaigne states that they are not so uncommon in general paralysis as some authors believe. In a case quoted by him they preceded all the characteristic symptoms.

Invasion Period of Melancholia, followed by Exaltation, Paresis, and Paralytic Dementia ; three murders, and three attempted murders, in invasion stage ; one murder in second stage of developed disease.

CASE 1.—Watch-case maker, æt. 29, tried for murder of infant son, acquitted on ground of insanity. Was an intelligent and skilful workman. For six months previous to crime had been in an unsettled and desponding state because of failure to

accomplish his work ; became very melancholic, cut the child's throat, and wandered aimlessly from home. On arrest, assigned as his reason for the crime that the child was better dead than starving. On admission, very depressed ; shortly afterwards fibrillar tremor appeared, speech became affected, grandiose notions developed, referring to the building of tunnels, and the reorganisation of society. Further stage of restless noisy delirium, progress of parietic symptoms, and death, just over two years subsequent to crime.

Here is a skilled workman, the nature of whose occupation necessitated keen eyesight and delicate manipulation. Besides the pupillary anomalies, there are a number of intra- and extra-ocular phenomena which are present with more or less frequency in the early stages of the disease. Again, the acquired accomplishments, which are requisite for the complicated association of cerebral innervation and muscular co-ordinated adaptation, are among the first to fail ; add to these the waning of the reasoning faculty, resulting in a morbid and gloomy outlook with reference to the child's future, and we may assume that here is a case in which homicide was the direct outcome of the melancholia induced by the feelings of bodily weakness, which incapacitated him from earning his livelihood and contributing to the support of his family.

It is a noteworthy fact that in the six cases of murder committed in the melancholic stage of the disease, the offspring was the victim in every instance. The feelings of bodily weakness, the gloomy affective tone, the sacrifice of children, are similarly seen in the lactational melancholia of nursing women, but in them suicidal feelings are invariably associated with the homicidal promptings, whereas the suicidal intent is rare in the melancholic variety of general paralysis. Perhaps in these cases, which are subsequently followed by exaltation, the latent, but soon to be developed, egotism prevents the expression of any tendency to self-destruction. I am cognisant of only one doubtful case of general paralysis following lactational melancholia, but amongst the sequelæ maniacal attacks are not uncommon, and there are cases in the asylum now in which this form of melancholia has been succeeded by a chronic insanity with delusions of grandeur. Campbell Clark relates one case. The woman passed through a brief period of melancholia during lactation. She threatened to commit

suicide, and also threatened to take the lives of her children. In a few weeks she became demented, restless and destructive. Pupils showed inequality, speech became affected, hemiplegia followed, and death took place one year after she became insane. The characteristic pathological appearances were noted *post mortem*.

CASE 2.—Chairmaker, æt. 56, widower, history of syphilis and drink. Out of work for nine months, during which time was hypochondriacal and despondent. Shortly afterwards, admitted into an asylum with embarrassed speech and exalted ideas. Paretic symptoms soon developed. Early one morning, some months after admission, he left his bed, picked up a chair, and began to beat a fellow patient who was very ill at the time, and who died almost immediately after. A coroner's jury returned a verdict of wilful murder—not tried. Transferred to Broadmoor. On reception, a feeble old man, with syphilitic skin eruption and unequal pupils ; grinds teeth, rambles incoherently, and resists being meddled with. Sometimes refuses food, saying it is poisoned. Later became quite helpless, demented, and paralysed. Died two years after admission.

This is one of those rare accidents which sometimes happen in asylums. The unfortunate occurrence seems to have taken place in the period which marks the transition from the first to the second stage of the established disease. There may be a steady drifting into dementia, the mental state being that of complacent self-satisfaction ; or there may be a morose, sullen, irascible, testy condition, the patients resenting any interference, and ready to show malevolence, as far as their physical condition permits. Sullivan quotes a similar case, recorded by Max Simon, where a general paralytic in the advanced stage, annoyed by the groans of the patient next to him, crawled out of bed, and beat out the disturber's brains with a wooden shoe.

Of the remaining cases, one man with a history of head injury, who had been drinking heavily before the crime, murdered a woman in the delirious excitement ushering in the first stage. Another made an aggravated assault on a stranger in the period of exaltation ; his delusions were of a fighting nature—he had won fourteen Victoria Crosses, and had killed thousands of men. The last, with a history of syphilis and drink, killed his seven-year-old son, shortly after the develop-

ment of locomotor ataxia. His sight began to fail, he could not follow his occupation, and believing the child would starve, he cut its throat, having premeditated the crime for some time. Symptoms of general paralysis appeared eight years later, and proved rapidly fatal.

In the vast majority of cases of general paralysis optimism is the predominant feature of the mental symptoms, but in a small minority, estimated by Clouston at 3—4 *per cent.*, and by Stewart, of Glamorgan Asylum, at 5—6 *per cent.*, depression prevails. The melancholia has been attributed to various causes, but principally to the existence of visceral disease or disorder. Clouston states that nearly all his melancholic cases were tubercular subjects, and this observation has been confirmed by MacDonald in the *American Journal of Insanity*. Tubercle was found in 35 *per cent.* of the Broadmoor melancholic cases, as compared with 14 *per cent.* in the expansive and facile demented types. From the foregoing record of homicidal cases, it will be seen that a gloomy affective tone was almost invariably present, which was either limited to the invasion period, or existed throughout, or alternated with expansive symptoms in the later stages.

Sullivan states that the large majority of grave cases of violence depend on a primary homicidal impulse, and are related to more or less persistent states of emotional depression. The use of the word impulse, as applied to criminal acts generally, is, to say the least of it, unfortunate, meaning as it does mental force suddenly communicated, and as suddenly transformed into action. In those who perpetrate homicidal offences, the affective tone is gloomy in more than one form of mental disorder, but the part that impulse plays in these states of emotional depression is small, for when the thought of violence projects itself into the mind, it is rarely given effect to immediately, it grows with the growth of the insanity, and requires time to develop to its full intensity. In the cases previously recorded, we have seen that the homicidal acts were due to a gloomy forecast, morbid reasoning, persecutory delusions, and commanding hallucinations. Compelled acts depending on enforced ideas, are usually foreseen and feared, and sometimes instil horror into the patient's mind. In such cases there is a constant struggle between them and the volition, weakened though it may be. The quieter the patient,

the more does the act resemble a sudden impulse, whereas it merely marks the breaking down of the barriers, the termination of the conflict, and the surrender of the will to the dominant idea, which now pervades the mind to the exclusion of everything else. At last insanity of thought results in insanity of action.

Sexual Offences.

Labourer, single, history of drink, convicted of rape, July, 1890, sentenced to nine years' penal servitude. Admitted to Broadmoor, May, 1892, with well-marked symptoms of general paralysis. A persistent masturbator. Died August, 1892, after epileptiform seizures.

Carrier, married, history of sunstroke and drink ; short period of detention in an asylum two years prior to crime. Convicted of rape on his own daughter, æt. 18 years. Sentenced to five years' penal servitude, June, 1894. Admitted August, 1894, with developed general paralysis. Died January, 1896, æt. 39 years.

Decorator, single, history of drink ; convicted of carnally knowing and abusing a girl. Sentenced to penal servitude for life, October, 1884. Admitted December, 1893, with established general paralysis. Died February, 1895, æt. 46.

Plasterer, formerly soldier, history of drink ; tried for assault with attempt to commit a rape. Insane on arraignment. Admitted 1864, with mild, expansive type of the disease. In 1865, developed psycho-motor hallucinations with double personality. Declared there was a man inside him, whose head was set on his (patient's) head ; that this man worked his tongue and legs, making him say and do many things against his inclination ; that the man talked with his tongue and removed his arms and legs during the night, restoring them in the morning. Further progress of case was slow progressive dementia, epileptiform convulsions, and death, early in 1869.

The first three men were convicted and sent to prison, consequently the history of the initiatory symptoms is imperfectly known, but it is obvious that numbers one and two were suffering from the disease when the crime was committed. In all there is a history of intemperance. Marandon de Montyel states that alcohol, of all causes, apparently is most

frequently responsible for alterations in the genital sense, more especially in the direction of increase. The interest of the last case, apart from the association of the crime with the insanity, lies in the presence of that very rare condition, psycho-motor hallucination with double personality, or, as Pickett prefers to call it, accessory personality. There is a delusional idea of possession, and consequently a feeling of substituted or reduplicated personality. As the hallucinations assume the shape of language formulated by another, or of strange ideas abnormal to the patient's own train of thought, he believes that another personality speaks inside him and directs his thoughts and will. A similar hallucination appeared in one of the larceny cases, but in this instance "the other man" ate all the patient's food.

Offences against Property.

Arson.—The average age of the seven general paralytics who indulged in fire-raising was 38 years on admission. One is still alive. Five were found insane at trial; two were convicted, but both were admitted a few months afterwards, suffering from the disease. All belonged to the exalted type, and all denied the offence except one, who stated that he set fire to a hay-rick in order to clear the stack-yard. This pretence of innocence is very characteristic of sane fire-raisers; it is very rarely that they can be induced to confess. Their invariable answer to all queries directed to their connection with the offence is, "I don't know."

Larceny, etc.—On admission all these cases were in a more or less advanced stage of the malady. The average age at death was 40 years. Eleven were of the exalted type, thirteen of the demented type, and two of the depressed type. In dealing with these cases a difficulty at once presents itself. The great majority, in fact all but three, had been convicted and sentenced to terms of penal servitude. Their antecedent history is for the most part unknown, except their penal record, *i.e.*, the record of their previous convictions, for they were all habitual criminals, and their acquisitive proclivities had extended over many years. Strictly speaking, therefore, these were cases of general paralysis occurring in habitual thieves, not theft occurring as a result of general paralysis. Thus in quoting and in drawing conclusions from prison lunacy statistics, care must be

taken to keep this fact in view, otherwise fallacious deductions may be made. Of course, it can be argued that they had an invalid brain *ab ovo*; that they had a predisposition to the disease, their criminal tendencies being due to the instability of their mental and moral processes. Such an argument is difficult to refute, but we may cite the fact that the general paralytics form but 3 to 4 *per cent.* of the male insane convicts received into this asylum whose criminal bent and means of livelihood had taken the form of acquiring other people's property. Indeed, it is remarkable how seldom the disease is met with in the convict prisons, considering the loose and irregular life the average habitual criminal leads while at liberty. It would almost seem as if his terms of relegation to a disciplined life, with an uniform dietary and regular labour, acted rather as a safeguard than otherwise, for he is then kept from the evil effects of alcohol and the risks of syphilis. There is no opportunity of oscillating between the brothel and the public-house, which many of them do when not engaged in the labours of their specialty.

On the other hand, one of the first signs of the onset of the disease sometimes appears when a previously honest individual of blameless antecedents is arrested for theft. Such a man remains perfectly cool even when caught in the act, he is generally ready with some excuse, and views his position with perfect unconcern. He will appropriate, without discrimination, articles both useful and worthless. He does not, as a rule, acquire in the sense that he wishes to retain, for, if he steals freely, he bestows generously. In him the faculty of comparison is lost, and, with its disappearance, come absolute ideas; to wish for a thing is to have it, everything is his to take as he sees fit. The facile demented class, in whom grandiose notions and absolute ideas are not so obtrusively evident, are much addicted to petty theft. In many ways they resemble children. In the child the instinct of acquisitiveness is strongly developed, and forms one of the chief features of its mental activity. This characteristic, it may be assumed, would remain as a potent factor throughout life, were it not for the gradual building-up of certain higher and inhibitory intellectual and volitional processes, such as prudence, reflection, and a sense of moral duty, which go to make up that self-controlling capacity essential for the welfare and protection of society and the maintenance of

law and order. Now what happens to these inhibitory mental processes in the ordinary general paralytic? The whole superstructure melts away in the inverse order of acquirement, the highest and latest developed disappearing first. In this process of dissolution we have a reversion to primitive modes of mental action, to the mental activity of childhood in fact, for general paralysis gives a replica of childhood with which no other form of insanity can compare. The parallelism is not confined to the acquisitiveness; for sometimes after birth the child is an incarnation of appetite which knows no restraint; children's lies are sometimes traceable to a natural tendency to secrete things, sometimes to a predominant imaginative power; selfishness is a characteristic trait. The comparison might be carried farther, but enough has been said for the purpose in view, as it is to the acquisitiveness that I wish more especially to direct attention, for, to this reversion to one of childhood's most active proclivities, I attribute, in great measure, the thieving propensities of the general paralytic. From a survey of the Broadmoor cases, we find that homicidal acts are chiefly associated with melancholic conditions and states of persecutory mental disorder; that these conditions invariably precede the onset of the physical symptoms but form part of the disease itself; that the mental phenomena, the delusions and hallucinations are not fickle and inconstant in character, but sufficiently fixed and systematised to cause resolute and purposive homicidal acts; that very frequently the offspring is the victim of the destroyer, and that, as a rule, the murder or attempted murder is not the result of impulse. That sexual offenders are influenced by alcohol, which stimulates the genital sense; and that the thieving propensities of the general paralytic may, in great measure, be ascribed to a reversion, by a process of dissolution, to the acquisitive tendencies, which form a prominent feature of the mental activity of childhood.

DISCUSSION.

Dr. BRAYN.—Dr. Baker's paper opens new ground with regard to the connection of general paralysis with crime. In this asylum we have nothing like the experience of general paralysis that you have in most of your asylums, and this shows the rarity of the connection of general paralysis with serious offences. The larger proportion of the general paralytic cases here are admitted for offences against property, and not for offences against the person. I have no doubt that petty offences are common in the earlier stages of general paralysis, but we do not hear of them here because a man gets into an ordinary asylum. Probably there are more of such cases than statistics would show us in that respect. With

regard to the cases which have been here for offences against property, these men have been criminals all their lives, and probably what has saved them from becoming insane is the care that is taken of them in prison, where they are compelled to live regular lives. The life of the habitual criminal outside, so far as I have been able to gather from them when they have come back to prison, is a series of orgies. There is also one remark I should like to make about homicidal impulses. The word "impulse" is so frequently used in what I think is a wrong sense, unless you take it that "imperative idea" or "imperative conception" is the same thing as "impulse." The idea has frequently been in their minds for a long time previously. Many cases come here for crimes supposed to have been committed from "impulse," but the patients have been thinking and brooding over the matter for a long time until they become controlled by their morbid ideas.

Dr. WEATHERLY.—We have all been intensely interested in Dr. Baker's paper. The thing that chiefly strikes me is that there is nothing essentially different in the class of crimes committed by these patients, from the class committed by those suffering from other forms of insanity. I was hoping we should hear that there was a class of crime that was committed more frequently by people whose after-history proved them to be general paralytics; but so far as I can gather from the paper, I cannot see that there is anything really definite in view of which we could say that such and such a crime would be more likely to occur in general paralysis. I agree with Dr. Baker in the use of the word "impulse." Medical men in giving evidence at trials often make wrong use of this word "impulse." It is most important to try and impress on the jury that it is not so much the impulse at the time, as the ideas which have been repeated in the man's mind, probably the result of some delusion, which at last overpower and master him.

Dr. MORRISON.—One would have thought, having regard to the pathology of the disease, that the crimes would be atypical in character. General paralysis is a very gross disease, and affects very large areas, and almost every centre may be affected in a very gross manner. I cannot gather why Dr. Weatherly should expect a type of crime. For my part, I should expect crime of any form and gross in character.

Dr. BAKER.—I cannot say that there is any particular type of crime characteristic of the disease, unless it is petty larceny, which is usually associated with the demented form. Assaults and acts of indecency may accompany the expansive prodromata, but the offenders are soon transferred to asylum custody. Homicide occurs in the melancholic variety, but as the melancholic cases are few homicidal acts are consequently rare.

Dr. BLATCHFORD.—Dr. Baker mentioned in his paper that one of the causes of the scarcity of general paralytics amongst criminal lunatics may be due to the regular life they are compelled to lead during a great part of their existence, but I thought that a more likely cause is that the criminal class is as a rule of a low type of development, and has not those complicated association neurons developed which characterise the more highly developed members of the community, and which are probably the first to suffer in general paralysis, and that added to the want of development of these higher nerve-cells and processes is the fact that the occupation of the ordinary criminal does not involve that stress and strain which Dr. Mott considers the exciting cause of the breakdown of nerve-cells, already predisposed by faulty heredity or disease.

Dr. MACDONALD.—I feel that I ought to say one word after having been told that this is the paper I "commanded." I am sure you will all thank me for having commanded it. I knew beforehand that it would be deserving of your closest attention, and that it would be sure to create an interesting discussion, and I must congratulate and thank Dr. Baker for this able contribution on a difficult subject. One remark which fell from Dr. Baker and from Dr. Brayn especially pleased me—I mean the strong expression of opinion as regards the use of the word "impulse." I cannot help saying that I most thoroughly agree with Dr. Brayn and Dr. Baker that this word has been abused; that many of the crimes said to be due to sudden impulses are, as they have said, well and carefully planned and long thought out. Therefore I am glad that I extracted this paper from Dr. Baker, and I am even more glad that I have had the pleasure of listening to this expression of opinion from the physicians at Broadmoor, which ought to make us think and weigh our words with care and deliberation.

A Few Remarks on the Registration of Nurses and the Nurses Registration Bill from the Mental Nursing Point of View. By D. G. THOMSON, M.D., Medical Superintendent, Norfolk County Asylum.

IT must be gratifying to us that our Association has in a great measure solved for itself the problem of registration which is now agitating the nursing world and divided it into two hostile camps—those for and those against registration.

I am sure too much credit cannot be given to the pioneers and their successors, members of our old-established Association, for their labours, which have resulted on the whole in an admirable and uniform system of training, examination, certification, and registration of qualified mental nurses ; and were it not that the authorities in general nursing firmly believe “no good can come out of Nazareth,” they might do well to imitate our scheme, or procedure rather, as a basis for the registration of general nurses.

I assume, as a matter of course, that you are all in favour of the registration of general nurses. A more feeble and childish protest against it than that published in the *British Medical Journal* of April 2nd it would be difficult to find, and what little semblance of logical argument it contains has been ably refuted in letters published later by Helen Munro Ferguson, “M.B.,” and others.

All the arguments contained in the manifesto against registration could be, and were, used when the registration of medical practitioners was mooted in 1850. There is much that is flotsam and jetsam on the troubled sea of medical politics and practice now, but amidst it all we at least have one solid reliable plank to paddle about on, *viz.* registration.

I must not take up your time with this aspect of the question or I will be ruled out of order, yet I will risk it for a few moments to allude to one or two arguments in favour of registration, and I will put it in the form of a question. How would we registered medical practitioners like to be in the position of being unregistered ? How would we like all sorts of unqualified, half-qualified people competing on terms of legal equality with us ? Not at all, I fancy, and still less so if our profession were

a uniformed one like the military or the nursing professions; as it is illegal to masquerade in genuine military uniform, so ought it to be illegal to masquerade in omnibuses, theatres, and other public places, or in very private and very doubtful nursing homes in a registered nurse's standard uniform, as is done now by female pickpockets, massage Jezebels, *et hoc genus omne*.

I think, too, with our usual national tendency to unconscious hypocrisy, far too much is made of the moral or social qualifications of a nurse made so much of by the opponents of registration; indeed, this is an aspect of our own certificate and registration which has always seemed childish and invidious. The age of the asylum keeper's whip and Sarah Gamp's gin-bottle has passed, and with them the brutality and coarseness of their users. The next stage in evolution, the extreme opposite, is also almost past—the inefficient pillow-smoothing angel or the good-natured, untrained asylum attendant. These in turn are being succeeded by the technically skilled and efficiently trained general or mental nurse, male or female, and with this training comes the suitable “morale” (not morals), conduct, bearing, and professional *esprit de corps*. In my opinion morals should not appear on a nurse's certificate any more than on a medical practitioner's diploma, as those afflicted with intemperance, harlotry, mendacity, etc., would, other considerations apart, be weeded out long before the examination and certification stage; indeed, I always feel myself quite incompetent to decide on any one else's morals, far less to cast the first stone, when I certify or refuse to certify that “A. B. is a moral person,” etc.

However, as I said before, I assume that you are all in favour of registration, so I will without further preamble proceed to glance at the points in the Bill now before Parliament which in any way affect mental nursing, and make a few remarks thereon.

Section 4 states that a Council shall be incorporated, to be called the “General Council of Nursing Education and Registration of the United Kingdom.”

Section 5 states that this Council shall consist of thirty-one persons, to be appointed or elected as follows:

A. Two nominees of the Privy Council, one a registered medical practitioner and one a nurse.

B. Five registered medical practitioners who shall be teachers

of nurses in nurse training schools attached to general hospitals (three for England, two for Scotland, one for Ireland).

C. One registered medical practitioner in general practice appointed by the British Medical Association.

D, E, F, G, H. Eight matrons, six elected by matrons of London, Provincial or Welsh, Scottish, Irish, general hospitals of a hundred beds, and two matrons of Poor Law Infirmaries of not less than two hundred beds, elected by matrons of such infirmaries.

I—O. Fourteen nurses. Ten by registered nurses of England, Scotland, and Ireland. One representing Naval and Military Nurses: Appointed by Admiralty and Secretary of State for War; one appointed by Matrons' Council of Great Britain and Ireland; one appointed by Queen Victoria's Jubilee Institute for Nurses; one appointed by Royal British Nurses' Association.

P. One person who must either be a registered medical practitioner or a nurse to be appointed by the Asylum Workers' Association.

The Council then is to consist of thirty-one persons, of whom seven are registered medical practitioners, eight matrons, and sixteen nurses, or if the Asylum Workers' Association elect a medical practitioner and not a nurse to represent them on the Council, the numbers will be eight medical men, eight matrons, and fifteen nurses. This is not the place to discuss the great disparity between the numbers of medical men and matrons and nurses, or nurses rather, for a matron is practically a nurse, with high administrative rank superadded. A matron is as much a nurse as a surgeon-general is a medical practitioner. I would like to digress here for a moment to suggest that as matron seems to be the name given to the chief female officer of a medical institution, and as the name is used in the Lunacy Acts and in the Bill under consideration, that it would be advisable if the asylum superintendents adopted that name for the chief female officer of our asylums. Chief nurse, head female attendant, housekeeper, lady superintendent, and so on, which are terms used in asylums, have no very definite or recognised meaning, whereas the term matron is understood both by the profession and the laity.

Now to consider the clause more particularly affecting us alienists—sub-section P.

I don't know to whom we are indebted for the introduction

of this clause; all honour and thanks to whoever it was, for I know enough of the lofty scorn and opposition shown towards the recognition of our asylum trained nurses, male and female, as being nurses at all, to realise that much noble advocacy of their cause and of their right to be considered as such must have been brought to bear on the promoters of the Bill to account for their being accorded a representative at all. Half a loaf is better than no bread, and there is much latent power in the thin end of the wedge. I have no figures before me to show the comparative numbers of hospital nurses and asylum nurses, still without figures one can surmise that the disproportion cannot be so great as one to thirty in any scheme, as a basis of representation on the Council. Surely if the total number thirty-one is a fixed limit of members on the Council, clause M or clause O, either or both, *viz.* the nurse member appointed by the Matrons' Council, and the nurse member appointed by the Royal British Nurses' Association, might have been omitted as redundant and one or two representatives added to the solitary performer acting on behalf of the Asylum Workers' Association. Happy thought, by the way: let us hail the absence of the word lunatic in this bill as an adjective before the word asylum.

Living as I do in the wilds of East Anglia, I cannot always attend the meetings of the Parliamentary Committee of the Medico-Psychological Association of which I am a member, so have not heard what chances, if any, there is of this Bill becoming law, nor do I know if it would be possible to have the number of representatives of the *circa* 10,000 persons engaged in mental nursing more adequately and proportionately increased.

Another matter concerning us is found in section 15, whereby any nurse claiming to be registered under this Act shall have completed a *three* years' term of training in hospital wards approved of by the Council, etc. Not cavilling at the term hospital wards, but assuming the term hospital to include mental hospital or asylum, note must be taken of the *three* years' training; this will necessitate our increasing our minimum period of two years required for the certificate in mental nursing to three years. At the last discussion on this subject many were in favour of three years' service and training; they were, however, in a minority. Minorities nowadays have more rights than

formerly, and it would appear that their views will now have after all to be adopted.

One other matter and I have done. Why is it that the representative of mental nursing on the Nursing Council is to be a doctor or a nurse *appointed by the Asylum Workers' Association*? How has this come about? I have no wish to be captious. I have every sympathy with and interest in the Asylum Workers' Association, or I would not be a life member, and I am quite open to conviction that the Asylum Workers' Association is the most important and suitable body to elect a representative to advocate and maintain the importance and interests of our mental nurses on the Nursing Council provided the arguments used to convince me are valid, but *a priori* and without much opportunity for consultation with those qualified to give an opinion on the subject, I should have thought that the Medico-Psychological Association would have been the body corporate to have had this privilege. Long established, of wide influence and knowledge in all matters pertaining to the insane and their needs, possessed of an organisation and machinery far in advance of any kindred association, and last, not least, the pioneer and organiser of that training and status which is now the privilege of every mental nurse.

The After-care of Friendless Patients Discharged from Asylums, as provided for by the Scottish Probationary Procedure.⁽¹⁾ By J. CARLYLE JOHNSTONE, M.D., Medical Superintendent of the Roxburgh District Asylum, Melrose.

By the Act 25 and 26 Vict. cap. 54, sect. 16, the General Board of Lunacy, Scotland, may grant authority for the liberation on trial or probation of any lunatic from any asylum for such time and under such regulations as the Board may consider necessary or proper, and by the Act 29 and 30 Vict. cap. 51, sect. 8, every pauper lunatic who is discharged on probation shall remain subject to inspection by the Commissioners during the period of probation, and it shall not be lawful for

the parish council to take any such pauper lunatic off the poor roll, or to alter the conditions on which probationary discharge was granted, without the sanction of the Board, during the period of probation.

Procedure for removal on probation of pauper lunatics from establishments for the insane.—Application must be made for the General Board's sanction by the inspector of poor of the parish to which the patient is chargeable according to a prescribed form.⁽²⁾ In this form is included, among other particulars, a statement of the name and address of the person with whom the patient is to be placed, the parish in which the proposed residence is situated, and the nature and weekly amount of the parochial relief to be given. It also contains a medical certificate signed by the medical superintendent of the asylum, giving particulars as to the patient's mental state and bodily health and condition, and stating that the patient is a suitable case to be liberated on trial for a certain period. The General Board, after having duly considered the application, statement, and medical certificate, and if satisfied as to the circumstances in which it is proposed to place the patient and as to his fitness for removal from the asylum, grant their sanction for his liberation on probation for a period which, according to the existing regulations, must not exceed one year.

Care and supervision of pauper lunatics discharged on probation.—Pauper patients discharged on probation are, unless the General Board on special application regulate otherwise, to be visited once in every three months by a medical man appointed by the parish council, the first visit being paid within three weeks after sanction has been granted, and once in every six months by the inspector of poor, who must record their visits in a "visiting book," and during the period of probation the patients remain subject to visitation by the Commissioners in Lunacy, and generally to the Board's instructions applicable to patients sanctioned to reside permanently in private dwellings. Though "pauper" lunatics on probation (as frequently happens) may require no parochial aid during the currency of the probationary period,⁽³⁾ they cannot during that time be removed from the poor roll without the sanction of the General Board, unless certified as recovered, nor can any of the conditions on which sanction was granted be altered without such authority. On an order of the Board, or on an entry being made by the

medical officer in the visiting book that a pauper patient has ceased to be suitable for remaining out on probation, or when for any other reason it is deemed necessary to send the patient back to the asylum, the superintendent is bound to receive him, provided that the period of probation is still current. Before the period of probation expires, either (1) the patient must be formally discharged as recovered, or (2) he must be replaced in the asylum, or (3) if he is to remain out of the asylum and to be in receipt of parochial relief, the General Board's sanction must be obtained to the manner in which he is to be provided for.

Observations.—Although the special object of statutory removal on probation apparently is to permit of the patient's conditional liberation so as to test his fitness for permanent discharge, the procedure at the same time provides an admirable way and means of arranging for the care and assistance of poor and friendless patients on their leaving asylums for the insane. In the experience of the writer, who for some years has been in the habit of discharging the great majority of his cases in this manner, probationary removal has seldom, if ever, failed to secure for necessitous patients all that was needed in the shape of after-care. And it is the writer's belief that this after-care can be adequately supplied to all the indigent insane of Scotland on their discharge from asylums, provided that the probationary procedure, as authorised by statute, and as regulated by the General Board of Lunacy, is loyally carried out by the parish authorities and the superintendents of the asylums working cordially together for the patient's benefit.

It is the business of the inspector of poor, in regard to all cases of insanity chargeable on the rates, to make himself fully acquainted with the financial and social circumstances of the patient. He is accordingly in the best position to ascertain what pecuniary assistance, if any, will be required by the patient after his removal from the asylum, what other care and help must be provided, and what are the prospects of the patient's being able to secure employment and to support himself. It has been the custom of the Scottish parochial authorities to take a large and generous view of their duties and responsibilities with regard to the insane poor. It is very seldom that one hears of any niggardly or negligent treatment of their insane charges on the part of these authorities. We

may take it that the parish councillors and their officers are actuated not merely by humanitarian principles in this matter, but that they recognise that any other line of conduct would prove to be bad public economy. It is accordingly the common experience that, while the wants of these probationary cases are provided for in a generous and suitable manner, the inspector of poor finds it to be in the interest of both parties to endeavour to secure for the patient such conditions as will as soon as possible enable him to earn his own livelihood and to relieve the parish of the burden of his maintenance. The interests of both the public and the individual are probably thus more satisfactorily protected than could be done by any so-called "charitable" means, which, if well-intended, are apt to be ill-directed, loose, and unmethodic.

The medical superintendent of the asylum, provided that he takes a proper personal interest in his patients, is also likely to possess a sufficient knowledge of the patient's capacity and requirements and of his circumstances and prospects in the outside world, to enable him to judge whether the proposed arrangements for his care and assistance are such as will prove suitable and sufficient in every respect. The parish authorities are always ready to listen to and carry out the superintendent's reasonable views and recommendations, and the superintendent should not sign the probationary certificate until he has satisfied himself that the patient is to be suitably provided for in every way during the currency of the probationary period. As this period may be fixed at any term up to twelve months, ample time is allowed for giving the patient a fresh start in life and for placing him in an independent position.

The patient's interests are further safeguarded by his liability to be visited and inspected at any time by the medical officers of the General Board of Lunacy. When he leaves the asylum on probation, he does not pass from the supervision and control of the General Board. This central authority continues to be charged with the supervision of everything that pertains to his care and protection, as long as the patient's name remains on the register of the insane, whether he is placed in a private dwelling or in an institution. The regulations prescribed by the Board for patients residing permanently in private dwellings apply also to patients removed from asylums on probation. The probationary patient accordingly

comes under inspection by the medical officer of the General Board, called a Deputy-Commissioner, whose special duty it is to visit the insane in private dwellings. The Deputy-Commissioner generally makes his visits once a year, but more frequently in some cases; he examines the reports entered in the visiting book by the parish officials, and he makes a separate report on each patient, which he sends to the General Board. His report deals with the whole circumstances of each case, the mental and bodily condition of the patient, the suitability of the patient for a private dwelling, the accommodation provided, the food, the clothing, the character of the household, and the way in which the duties of the guardians are performed. He also inquires into the adequacy of the money allowance given by the parish council. When making his visit he points out any defects which he may see in the arrangements, and any improvements which he thinks should be made, and a statement dealing with these matters is embodied in his report to the Board. On receiving the report of the Deputy-Commissioner the General Board take such steps as may be requisite to make the patient's condition satisfactory. There is seldom any difficulty in obtaining such changes as the Board think desirable, a letter to the inspector of poor being generally sufficient. (*)

It might be suggested that this probationary after-care may be overdone, that there may be too much official interference, that the patient's comfort and prospects may be prejudiced by the public nature of his supervision and control. In practice this is not found to be the case. The visits of the inspector of poor, the parish medical officer, and the Deputy-Commissioner do not entail any public demonstration of the fact that the patient is still under official guardianship. Everything that is necessary for his comfort and care can be secured without its being apparent to the community in which he is placed that his social position is different from that of any other citizen. An over-zealous official may, of course, render mischievous the most benevolent schemes and the best-laid plans, but this excess of zeal is not encouraged by the General Board of Lunacy. The regulations of the Board are intended to protect and to promote the interests of the patient, and, if there should be any risk of his condition or prospects being prejudicially affected by a too rigid observance of these

regulations, they can be, and are, with the Board's sanction, relaxed or modified to suit the peculiar circumstances of the case. For example, it not infrequently happens that patients soon after being discharged from asylums on probation, enter service, or engage otherwise in work which renders them self-supporting or which places them in positions where visitation by parochial officials would be injurious to their interests. In such cases the Board do not desire that patients should be visited by medical officers or inspectors of poor, and they suggest that, in such circumstances, it may be desirable to obtain a certificate of recovery, when that can be done without injury to the patient, or to get the patient himself to transmit such a certificate, with a view to his connection with the asylum being brought to an end.

It may be pointed out, in conclusion, that probationary removal from asylums, as provided for in Scotland, supplies other advantages besides satisfying the requirements as regards the after-care of poor and friendless patients. By the use of this procedure (which applies both to cases maintained at public cost and to cases supported out of private funds), it is possible to remove many patients from asylums at an earlier period than would be considered prudent, were no means provided for testing in this practical way their fitness for final discharge. The warrant for the patient's detention holds good during the currency of the probationary period, and, if he proves on trial to be unfit for permanent discharge, he can be replaced in the asylum without trouble or expense. It is found, moreover, that parochial authorities and the families of patients are more ready to provide private care for unrecovered cases in which asylum treatment has ceased to be necessary or desirable, when a reasonable period of trial is arranged for before finally removing the patient's name from the books of the asylum. The large majority of such cases are benefited by removal from the institution to the private dwelling, and many of them are removed from the poor roll and require no further assistance from public funds when their period of probation expires. The judicious use of this procedure, therefore, not only confers a distinct benefit on poor persons returning to social life after detention in an asylum, but it tends to an appreciable diminution of public expenditure.

(¹) Paper read at the International Home Relief Congress, Edinburgh, June, 1904.—(²) It may be explained that there is a parish council for every parish in Scotland, and that it is the duty of this council through its paid officer, the inspector of poor, to provide for the maintenance of every poor person who is unable to maintain himself. As part of this duty it has to provide for the insane poor.—(³) It often happens that the patient belongs to a family which, though unable to maintain him in the asylum, is in sufficiently good circumstances not to require any parochial aid for him during the currency of the probationary period.—(⁴) Among other means of influencing parish councils there is what is known as the Government grant. This is a contribution towards the cost of maintenance of the insane poor given out of the general taxation of the country, amounting as a rule to about one half of the cost. This money is not paid to a parish council in respect of any patient who is not, in the opinion of the General Board, suitably provided for, and it is withheld in the cases where the instructions of the board are not carried out.

On the Need for Family Care of Persons of Unsound Mind in Ireland. By CONOLLY NORMAN. (¹)

THE question of the adoption in Ireland of family care as a method of dealing with mental unsoundness is at once highly academic and highly practical: academic because this mode of treatment has never been hitherto attempted in that country; and practical, because it may be said, with a slight modification of a familiar line, that no nation wants it so much. Perhaps all this is only another way of saying that the question stands exactly in that position in which any earnest and vigorous reformer likes to take a subject up. The crop is ripe, but no sickle has yet swept over the field.

How fresh the topic is in Ireland may be indicated by the remarkable discussions that have been lately going on with reference to the public treatment of the insane in that island. Ireland is probably the poorest country in Europe, and the country in which the great majority of the population live under the least complex and the least highly-developed conditions. Circumstances of various kinds, however, have brought the lunacy problem into extreme prominence—a prominence rarely obtained for it in any other comparatively primitive country. The complete transference of power in respect of matters of local government from one portion of society to another, the latter having been until recently quite unaccustomed to the responsibilities of self-government, has tended to bring prominently before the public mind a number

of social problems that were hitherto hidden more or less below the surface. The comparative accuracy of modern statistics, the effect of the accumulation of patients in asylums under improved management, and a possible real increase in occurring insanity, due to the indirect results of excessive emigration, have together contributed to bring about this curious state of affairs, that the number of insane who are registered is rapidly and largely increasing, while the general population is decreasing. According to the most recent official calculations, there is in Ireland one person of unsound mind to every 178 of the general population. Meanwhile, wealth—at least, such wealth as is represented by the margin available for charitable purposes—is not increasing, while the struggle for existence is daily becoming more keenly felt.

Some counsels that have been suggested in this matter savour of desperation. It has been held, apparently on the authority of an illustrious literary man and distinguished doctrinaire politician, that the asylums themselves are responsible for the increase of insanity, inasmuch as by keeping alive and curing persons of unsound mind they have led to a degeneration of the race. There are even nebulous hints floating in the air that it might be well to render those who have been insane incapable of propagating the species so as to lead to a greater freedom from disease in succeeding generations. There is a pretty general and strong prejudice against asylums conducted on modern lines. Those who do not openly call them nurseries of insanity at least look upon them as places where the mentally affected receive treatment which is unduly costly in proportion to the advantage accruing to the rest of the population. If we had not learned of recent years to regard as entirely too narrow that view of development which looks upon natural selection as being only an instrument to bring about the immediate betterment of the physical condition of the existing generations, we might have some sympathy with the sentiment which would dictate that the insane should be practically left uncared-for, and should be allowed to perish by natural processes. But the more extended and philosophical view which we now see to be the only tenable one forces us to conclude that the care of the unfit subserves some great ulterior developmental end, and is—to take no higher view of it—the necessary step towards the

attaining of a more perfect social state. Indeed, that it should be requisite to discuss this aspect of the matter at all is surprising, and appears to show the chaos of public feeling on such topics in my country.

It may be said that these are themes which it is unnecessary to more than hint at in addressing my present audience, and in fact I have merely referred to them as indicating that the question of reform in the treatment of the mentally afflicted is ripe for consideration in Ireland, and that the present is probably a favourable opportunity for ventilating the subject. It is easier to obtain a hearing for the suggestion of humane and advanced methods when the public is interested in the whole question, even though wild doctrines are being hurtled abroad, than in times when the public is apathetic.

Now, the existing state of affairs is this: the local governing bodies have determined to build no more expensive—that is to say, modern—asylums, and yet it is felt that, pending the operation of more drastic measures, some provision must be made for the increasing numbers of the insane. When the Irish Local Government Act was passed in the year 1898, its authors, acting apparently on very insufficient information, and having accepted very hasty and immature views, were unfortunate enough to adopt an enactment whereby a rate-in-aid, amounting to 2s. per head per week, was to be available for insane persons who were chronic and harmless, and who were to be maintained in disused workhouses or other suitable buildings apart from the existing lunatic asylums. The amount of rate-in-aid for these new institutions is just half of that which is available for the existing asylums, and thus the suggestion is made by the Government that a number of asylums should be started in the country at about half the cost of the existing institutions—such new asylums to be filled by the class called chronic and harmless. If some better scheme be not adopted within a few years there can be little doubt that these new cheap and inferior asylums will spring up all over the country, that they will fail to work satisfactorily, and that they will eventually be either suppressed or profoundly modified. There can be no doubt but that in the meantime they will have done an immensity of harm. It is, therefore, the more necessary at present to suggest some other mode of dealing with the existing problems—some mode which will not revolt the public con-

science by insufficient humanity, and will also not prove too great a drain on the public purse in a very poor country.

It would ill become a member of our speciality to encourage in any way the popular prejudice against asylums. In the first place, no one who reflects can fail to see that this prejudice is really to a large degree merely a survival, under slightly modified form, of the old prejudice against the insane themselves. The deep instinctive dread and hatred of insanity and of the insane is at the present day recognised as a thing which cannot be avowed, but those who one hundred years ago would have been loudest in giving expression to these feelings, and must now conceal them, satisfy the primæval instinct by abusing asylums and their directors. Besides, asylums must be accepted as an evil, if you will, but a necessary and inevitable evil in many cases. When all this has been said, the fact remains that there are a great many objections to be made against what we may call asylum life. The natural unit of society is the family. Existence in large institutions, which are not, and cannot, be modelled on family life, is an unnatural one. Such existence is uninteresting, monotonous, and irksome. Its tendency is to drive the mind in upon itself, to produce unhealthy brooding and dreaming, and to deprive the individual of the ordinary interests that belong to his fellow-creatures. The association together of numbers of persons with few interests in common, and who are not bound to each other by the close, and yet elastic, tie of family affection, is irksome, and tends to develop bad feeling and selfishness. Now, these drawbacks are common to all public institutions, and are not entirely peculiar to asylums. They are felt not only by the patients, whom the public charity is intended to benefit, but they are felt by the staffs who administer the charity. Among the latter, petty jealousies, suspicions, and all kinds of rancorous ill-feelings are apt to arise, and are surely fostered by the peculiar conditions of institution life. Association without the most perfect harmony engenders an irritability which is hostile to all good feeling. It is proverbial that this condition of affairs springs up even amongst the most high-minded. There is an old Celtic story of how St. Patrick, bestowing a bishopric on a favourite disciple, told him he was sending him to a See so situated that they would not be too far apart to meet occasionally, nor too near to remain friends. It is possible

that our patients often feel the injurious effects of institution life less than might be expected, because their condition is an abnormal one already, but no one can have watched the effects which supervene in old nurses and attendants without being painfully aware that in many cases a marked deterioration of disposition is the consequence of the unnatural, monotonous, and trying nature of their surroundings and of their calling. So much have I myself been struck by this that I have long held that the most perfect way to obtain asylum service at its best would be by the organisation of a short-service system, whereby the great majority of the staff—excepting, of course, those who have shown special aptitude and special staying power—would be young and fresh. I observe that Professor Kräpelin would appear to have arrived at a somewhat similar conclusion, for I have recently seen him quoted as holding that an asylum attendant's period of service should be limited to ten years. I dwell upon this point not only as showing that there is something unhygienic in the moral atmosphere of large institutions, but also because it seems to me to require being pointed out that as our attendants are to a large degree the instruments by which we work upon our patients, if the conditions of asylum life are unhealthy we will find ourselves in the end working with blunted and rusty tools.

[Of course these sentiments are in no way new. Soon after Dr. S. G. Howe (*clarum et venerabile nomen*) became Chairman of the State Board of Charities for Massachusetts he laid down in one of his reports the following general principles of public charity:

“That it is better to separate and diffuse the dependent classes than to congregate them.

“That we ought to avail ourselves as much as possible of those remedial agencies which exist in society—the family, social influences, industrial occupations, and the like.

“That we should enlist not only the greatest possible amount of popular sympathy, but the greatest number of individuals and of families, in the care and treatment of the dependent.

“That we should build up public institutions (*i. e.*, erect public buildings) only in the last resort.

“That these should be kept as small as is consistent with wise economy, and so arranged as to turn the strength and faculties of the inmates to the best account.

"That we should not retain the inmates any longer than is manifestly for their good, irrespective of their usefulness in the institution."

Dr. Howe at the same time strongly urged the family care of dependent children, and owing to the adoption of his methods Massachusetts now stands second only to Scotland in this department of home relief. With regard to the care of the insane he referred in eloquent language to the example of Gheel.

"Gheel," he tells us, "was not enacted, nor built; it grew. Planted centuries ago, the virtue that was in the seminal idea—*occupation for the insane in company with the sane*—counteracted the false ideas, and kept the whole in vigorous life." "It is," he says, "*by utilising the brain power which remains to lunatics* (and which we waste) that the peasants of Gheel make the wilderness to blossom as the rose."

Speaking again of the dependent classes generally, though more particularly of the deaf and blind, Howe says:

"Out of unsound and abnormal conditions there must, of course, grow certain mental and moral tendencies, which, to say the least, are unwholesome. . . . Each acts upon all; and the characteristics of class, or caste, are rapidly developed. . . . This is seen in those who are gathered in almshouses. Before entering they had, of course, become poor and broken down; but they nevertheless had some individuality of character; they were not yet formed into the complete pauper shape, though they were tending in that direction. But when a man is gathered with others like himself into a general almshouse, he is apt to lose it utterly. If his associates have also lost theirs, they act and react unfavourably upon each other. The evils growing out of their condition are all intensified by close association, and the pauper spirit, strong as that of a caste, soon becomes the pervading spirit of the place. It is at once perceptible to the moral sense in all large institutions, and can hardly be kept down, because it arises from morbid mental and moral conditions." Dr. Howe would not have us separate the blind and the deaf-mute into distinct divisions of humanity. "It is common to regard these as forming special classes, though strictly speaking no such classes exist in nature. The cases spring up sporadically among the people." He saw, however, the fatal tendency to isolation which their inability to com-

municate with their fellow-creatures bestows upon deaf-mutes, and with the penetration of genius he argued that they should learn not sign language, which must always be the language of the few and the dependent, but articulate speech, whereby they would be placed on a level with their fellow-men. The most brilliant results have followed from the adoption of his doctrines in this respect, and the soundness of his views, both in theory and practice, is now universally acknowledged, though he himself did not live to see the perfect triumph of the effort to break down the isolation of the deaf-mute. It is perhaps pathetic to think that this great advocate of freedom and advance never saw even the beginning of family care for the insane in Massachusetts, but he had already done more than one man's work, and although he was able to rouse the interest of his countrymen in various other classes of the dependent he stood practically alone in his views as to the possibility of introducing home relief for the mentally afflicted. The subsequent experiences of the second settlement in Belgium and of France and Germany have amply shown that here too Howe preached not merely a counsel of perfection but of the plainly practical had he but found a sympathetic audience. His early recognition of the baneful influences of institution life is interesting to recall now that these have become more or less a commonplace of this discussion. It is notable also that some of the evils on which he particularly dwells, which can be to some degree avoided by the bustle and movement of population in a wisely conducted large general asylum, would be hideously accentuated under the conditions, to which reference will be presently made, of herding together "incurables" under cheap management without hope or help or chance of change—frozen like perch in a lump of ice, or rather petrified like corals in a block of limestone.]

There are then weighty reasons for avoiding, as far as is possible, the accumulation of patients in asylums, and the multiplication of those edifices. When and where an asylum must be built, it ought to be built and managed and manned in the very best possible manner, bearing in mind that its object should be to form a hospital for the cure of the curable, for the treatment of the sick, for the safeguarding of those who cannot be allowed to be at large, and for the amelioration and thorough study of the condition of such patients as can

eventually, under proper regulations, be restored to family life with a fair measure of safety, though uncured. It is the class to whom I have last referred who mainly tend to accumulate, and taking into account the well-known money saving which can be accomplished by a system of family care, it would appear that such cases can be treated economically, and yet with an avoidance of the peculiar evils that are apt to arise in connection with asylums. It is much to be regretted that in the framing of the Irish Local Government Act this question was not brought before those who were responsible for that statute. The alternative to the ordinary asylum contemplated in the present Irish law is an institution to be run at half price. Economy is to be obtained by diminishing medical supervision to something approaching a vanishing point, and by lessening the staff to such a degree as would probably render efficient care unattainable, and would put nursing out of the question. The housing of the insane in public institutions in Ireland has been described as extravagant, palatial, and so forth. We may yield this point because it is very improbable that any of the new second-rate asylums will be able to work without such modifications in structure as will bring them very near, if not quite up to the majority of the existing asylums whose architectural advantages have been so much exaggerated. But the new second class asylums being deficient in supervising staff, being carefully lopped of every "extravagance," will be places where no occupation and no amusement can be provided for the inmates at the proposed cost. Such places would have every disadvantage belonging to an asylum without any of the safeguards or any of the ameliorating agencies that modern science and modern humanity have found to be required. It is impossible to say precisely what class of the insane were intended for these particular institutions, and it would appear that the framers of recent enactments have themselves the most shadowy ideas on the subject. If the chronic and harmless mean the working population of our asylums it would be a manifest, gross, and intolerable injustice that these poor people should be subjected to all the discomforts of asylum life without any of its ameliorations, as would be the case in a second-rate cheap asylum. If, on the other hand, the chronic and harmless include the old and feeble and bed-ridden, I submit that, from a merely humanitarian point of view, these people require more

care than the more recent and acute cases, who, by their recovery, are apt to give a better result for the money spent.

I feel that in saying so much on the general aspects of this question I am undertaking a task that may seem superfluous to most of my present hearers, but I enter upon these details in order that the position of the question in my country may be thoroughly intelligible. Speaking here, and speaking to you, I need not adduce any arguments as to the feasibility of the family care of the insane. It is probably not too much to say that the family care of a large section of the unsound of mind has proved possible, beneficial, and economical in every country where it has been intelligently and conscientiously attempted. In any place where the endeavour has been made up to the present success has followed when anyone has been found who has taken up the subject, as Dr. Féré has said, "in the way he would take up his own business."

There are in Ireland three practical difficulties, none of which are insuperable, if one can judge from experience elsewhere. The first may be called official *vis inertiae*. In all public departments there is, of course, a tendency to go on doing in the future what has been done in the past. Irish officials may, perhaps, be forgiven for carrying this tendency further than other people on account of their peculiarly isolated and insecure position. There is, unfortunately, no body of public opinion in the country which is sufficiently intelligent and disinterested to act as a motive force in any particular direction on such subjects as the proper conduct of great public charities.

The second difficulty arises from the fact that the bodies which now carry on local government in Ireland, being new to their duties and responsibilities, are not very easy to move in the direction of something which they may conceive to be risky and unpopular. Unpopular with the uninstructed bulk of the people such a measure as family care of the insane would surely be at first, and it would, therefore, seem much easier and more popular for the local bodies to go on distributing labour and patronage and constructing or adapting asylums on a more or less economical plan instead of diminishing the occupation of these institutions by the adoption of family care.

The third difficulty which I see in the way is the difficulty of

finding locations suitable for boarding out. The Irish peasants, who form the class from whom most of our patients are drawn, are very poor, and, therefore, would be willing enough to receive the help which the payment for a patient might bring them. They are very kindly and very tolerant of the infirm, and would, therefore, I think, make good hosts for the insane, but they are, unfortunately, themselves probably among the worst-housed—if not the very worst-housed—of the populations of Western Europe. It must be said that things are slowly bettering themselves in this respect, and there is every reason to hope that the betterment will be more material and quicker in the near future. For the present it seems to me that this is the most serious difficulty in the way of family care in Ireland. The other two difficulties, I think, would be more readily overcome. The County Councils could eventually be persuaded that their interests and those of the insane are identical in these matters, and if public opinion favourable to the experiment can be evolved it is to be hoped that the official *vis inertiae* of which I have spoken would not prove an impassable barrier. One advantage we would have in attempting family care in Ireland—and this no small advantage in beginning anything—namely, that there is nothing to be undone. Sir Arthur Mitchell's book on the *Treatment of the Insane in Private Dwellings in Scotland* has shown us that talent and industry applied in this humane cause were capable, in the hands of the Scotch Commissioners, of drawing family care out of the slough of abuses in which it had nearly been overwhelmed. No such difficulty exists in Ireland. Some foresight and prudence will, no doubt, be required in the inauguration of such a system. Care must be taken not to let the zeal of beginners outrun all support from popular opinion, and every endeavour should be adopted to avoid the occurrence of any scandals or risks in the earliest stages of the experiment. These precautions are, of course, easier to talk about in an abstract way than to carry out practically, but they are only such things as are necessary at the beginning of every fresh enterprise.

In my opinion, family care of the insane in Ireland should be organised in connection with the district asylums. [Perhaps it could most safely and judiciously be begun by placing patients in attendants' cottages on the asylum estate, or in the cottages of ex-attendants in the proximity of the asylum. These methods

have been adopted extensively and successfully in Germany, Holland, and Italy.] Only cases that have been studied in an asylum, and are thoroughly well known to the medical staff, should be sent out to family care. I am not one of those who believe that a perfectly ignorant person is likely to form as intelligent a judgment on a difficult and risky subject as one who has devoted his time and attention to that subject. Whatever we do there is an element of risk in the family care of the insane, just as there is an element of risk in the asylum care of the insane, and in either case the chief responsibility will best rest upon the person who is best acquainted with the peculiarities of his patient. Provision should be made for the power of returning the patient to the asylum whence he has come, should his physical or mental state demand such a course, or should his location prove, in the opinion of the authorities, to be in any way unsuitable. Provision should be made that the patients be visited by the Medical Superintendent in the homes of their hosts at such intervals as may be deemed suitable, and also occasionally irregularly. Provision should also be made by which the patient should visit the asylum and report himself if required to do so at stated intervals, following therein the example of the Berlin system.

An arrangement of this kind could be effected with the least alteration in the existing law. There is an enactment in Ireland at present, whereby a patient can be discharged from a district asylum on trial, while his maintenance is met from the asylum funds for the period of one month. Of this enactment I myself made frequent use, but it is manifestly insufficient even for its present purpose—the period of one month's trial being mostly quite inadequate. An extension of this provision with an arrangement that the period of trial could be from time to time renewed after expiration should the patient still remain insane, would enable patients to be, practically speaking, boarded out in family care. Of course, further and remoter supervision of patients in family care, together with supervision of their physicians, would be called for, just as is the case with patients in asylums. No doubt an addition would be requisite to the staff of commissioners, or, as they are called in Ireland, inspectors, but that would probably be desirable in any case, since those officers are numerically inadequate

to the duties they are now called upon to perform, although, perhaps, not so preposterously inadequate as their colleagues in England. The proposal to send out patients from the district asylums into family care, and retain them under the general supervision of the medical staff of the asylum, would also probably involve in most cases some increase of that staff. The economy which could be effected in maintenance by family care would probably be sufficient to cover the additional cost of inspection that would be involved, and also to leave a not inconsiderable margin. With regard to the total saving, however, I am not inclined to encourage a hope of a favourable balance on the maintenance account, although I believe that there will not be a deficit. My reason is that it seems to me that a great number of the patients whom we could send out into family care, and to whom we would give the pleasures of modified liberty and of family life in lieu of the supposed luxuries of an asylum, would be those very patients who would be most useful to us in the internal working of the institution. The loss of their services would either involve the employment of more paid attendants, or the purchase of more ready-made goods, or both, and a certain increase of the asylum maintenance account on this head must be expected. (2)

I have not said anything of the supervision or visitation of the patients in family care by Poor Law medical officers. I am doubtful as to how far it is safe anywhere to depend to any degree on what I fear must be a very perfunctory duty, and I am confident that such dependence must necessarily limit very greatly the cases in which family care might be utilised. However this may be elsewhere, and under other conditions, no one who knows what the Irish Poor Law service is, and how entirely overworked its medical men are at present, can imagine that any supervision it would be in their power to bestow on the insane in family care would be sufficient. There is also another reason why it is undesirable to associate the Poor Law service with this work. [Happily the institution of district asylums for the relief of the destitute insane preceded in Ireland the passing of the Poor Laws, and accordingly mental unsoundness occurring in the poorest person is regarded primarily as a disease to be cured or cared for and not merely as a phase of pauperism. This humane view was early adopted by the Irish law, and although the class of people above referred to who

hate the insane and all that tend upon them, and who love to shower upon them opprobrious epithets, mouth from time to time about the money that is wasted upon "pauper lunatics," the phrase remains as incorrect in fact as it is inhuman in spirit, and in Ireland our public patients are not paupers. They are not brought to the asylum by relieving officers. They are only sent to us from the workhouse if they happen to have for some other reason obtained admission to the workhouse.] The service of lunacy in Ireland is not a branch of the Poor Law service, and it is very desirable in the interests of our patients that it should never be. It is true, unfortunately, that insanity is the most pauperising of diseases, but as we have been able hitherto to manage our insane, both with regard to fiscal requirements and otherwise, without stigmatising them with the quite unnecessary brand of legal pauperism, it is very desirable that we should continue to do so. This was clearly seen by Sir Arthur Mitchell and his Commission who, reporting some years ago on the reforms required in relation to Irish lunacy, strongly deprecated the amalgamation of the two services. To endeavour now to associate pauperism and mental unsoundness would be a distinctly retrograde step.

(¹) An abstract of this paper was read at a meeting of the Fourth International Home Relief Congress at Edinburgh, June 8th, 1904. Certain clauses added as the paper passes through the press are distinguished by inclusion in square brackets.

(²) More than one speaker at the Congress observed on this aspect of the question, notably Dr. Parker of Gartloch, who pointed out that there is a fallacy in comparing the cost in district asylums, minus the best working patients, with the cost of the boarded out, many of whom are virtually wage earners. That family care may prove palatable to local authorities it is necessary to show that it is not unduly costly, but the true ground on which it should be advocated is that it is the best, and not that it is the cheapest mode of treatment. As Howe tells us above, the good of the inmates and not of the institution should be paramount.

Need of Care of the Weak-minded in Infancy and Childhood.(¹)—By HENRY RAYNER, M.D., Physician to the Out-patient Department for Mental Diseases at St. Thomas's Hospital.

THE necessity for special care of infants and young children afflicted with defective brain development has been increasingly recognised in recent years, but the modes for providing this care are as yet little developed.

The importance of the first seven years of life in brain development is most simply and forcibly shown by the increase in weight of this organ in that period of life.

Statistics on this point prepared by Vierordt show that the male brain increases from 381 grammes at birth to 945 grammes at the end of the first year—considerably more than doubling its weight in this important period. The same observer's tables show that by the end of the seventh year the brain averages about 1348 grammes, being about 140 grammes less than the average maximum weight. From birth to the end of the seventh year, the increase in weight is therefore about seven times (960 to 140 grammes) that which occurs after the seventh year. This growth, although so striking, is of intrinsically less importance, however, than the development of the highly specialised brain-cells which accompanies it. The growth alone, however, is sufficient to emphasise the vast importance of the nutritional and health conditions during the earliest years of life, but especially during the first year. Important as this is for the normal child, it is immensely more important for the child with a defective brain, whose very defect increases and intensifies any nutritional disadvantages to which it may be exposed.

The defective brain at this period of life is usually accompanied by imperfection in all the most important bodily functions. Digestion and assimilation are often feeble, the muscular system is weak, the body temperature is low, the circulation very poor, and the excretory functions deficient.

The retarded development of the digestive organs renders these weak-minded children specially liable to suffer from the effects of the unsuitable food, which is so common amongst the poor. They often need alimentation of a special character to meet this delayed development, which is commonly connoted by the tardy evolution of the teeth.

The disorders of digestion arising from unsuitable diet frequently produce great irritation and excitement, manifested by constant restlessness, crying, or screaming, in the infant. In those of very unstable nervous system even epileptic attacks may be produced. In older children night terrors are developed, and in others broken sleep or complete insomnia of a protracted character results.

The harm that is done to the already defective brain by

protracted sleeplessness and worry of the nerves is very great ; and is usually intensified by the resort to soothing syrups and other sedatives.

Indigestion and constipation in older and less defective children are sometimes responsible for the lying, thieving, and general want of habits of self-control, which are the source of so much trouble to the parents.

The evolution of the teeth in these cases requires the most sedulous attention ; to strengthen their growth, and to avert the decay which is so common as to be regarded as inevitable, and which helps to increase the digestive defect.

The low temperature of the body, manifested by chilblains and blue extremities, with proneness to chills and catarrhs, also demands very special care, in training them by skin stimulation, baths, etc., to be able to resist vicissitudes of temperature. The respiratory system needs great attention, being defective in many respects. The importance of pure air by night and day cannot be too strongly urged. The defective child, by living in hot rooms with impure air, develops the habit of mouth breathing. As a result of this the flow of blood to the nasal regions to warm the inspired air is prevented, and the growth of the surrounding parts and even the blood supply of the brain is thereby affected.

Mouth breathing also favours decay of the teeth, this aiding in the production of enlarged tonsils, sore throats, and catarrhs. It also induces adenoid growths, by which the mouth breathing is still further intensified.

The improvement in the mental capacity of normal children by the removal, or still better by the cure, of adenoids, is a well-recognised fact, and the desirability of preventing their occurrence in the abnormal is obviously important.

In weak-minded children the use of the lungs has to be stimulated in infants, and in older children, the habit of nasal and deep respiration has to be taught and established whenever it is possible, the unused lung apices in the absence of systematic training forming the predisposition to lung tuberculosis.

The muscular system also demands great attention, at first by rubbing and passive exercises, and later by persevering systematic training. In connection with these measures for muscular improvement, the vigour of the general circulation has to be

carefully developed. A celebrated head master is reported to have asserted that the difference between a clever boy and a stupid boy was the strength of the heart. Certainly in the weak-minded a good circulation often gives hopes of improvement, while a defective one gives rise to unhelpfulness.

These more prominent systemic defects, common to nearly all weak-brained children, need steady attention throughout childhood, and their neglect is inevitably accompanied by the loss of much of that improvability, which is present in the vast majority of these cases.

These weak-minded children also need to be carefully watched to prevent the development of bad habits, or to cure these if they exist. Such habits when neglected are difficult of cure, often militate against all after efforts at training, and distinctly damage the whole nervous system. They are often founded on local irritations such as thread-worms, phimosis, etc., etc.

It is not only on the preventive side, however, that so much can be done; the positive good of training of all kinds from earliest infancy is equally great. The training in habits of decency can be commenced too early. The training in attention and in co-ordination of movement can never be begun too soon, or be better or more perseveringly carried out than by a mother who has received instruction in suitable methods. The rudiments of self-control can equally be developed by an instructed mother, although unfortunately the uninstructed mother, under existing conditions, is a source of danger in this respect.

Very much more might be said in regard to special forms of mental defect and their special needs; but it is to be hoped that enough has been advanced to show the certain advantage of skilled care in the early periods of the life of these children.

The establishment of a system by which the care indicated could be carried out necessitates that there should be definite arrangements for ascertaining the existence of such cases. The parents of these children are often unwilling to suspect or to admit the existence of defect, so that it is not until they are becoming troublesome or unmanageable that aid is sought.

Much aid in the finding and reporting of such cases should come from medical men, nurses, and others working among the poor. It would be necessary that such workers should be

interested in the matter, so as to detect the children at the earliest stages; the children of two or three years would probably be disclosed by the parents themselves, if the existence of means of helping such children were commonly known.

The writer, indeed, has found that a considerable number of such cases are brought voluntarily, or sent by the agents of charitable associations, to his out-patient department for mental diseases in connection with a general hospital.

The organisation of the system of sending nurses and visitors to the homes of the poor to instruct mothers in the care of the health of their infants and children, which is now being originated, and which is the fundamental step in the prevention of disease and poverty, should afford increased opportunities for the early discovery of these defective children.

When discovered they should be brought to the notice of a medical specialist to direct and supervise the treatment. This would best be accomplished at an out-patient department in connection with a general hospital, and it would be of the utmost advantage if the specialist physician had at his service a small ward. In this ward the children could be received for short periods only for the treatment of special troubles, and especially for demonstrating to the parents the advantages of treatment.

Nurses specially trained, either in institutions for the feeble-minded or in the proposed hospital ward, should be provided, to visit the children in their own homes, and to instruct the mothers in the carrying out of the various methods of treatment prescribed. These nurses, by frequent visitation, should give encouragement in perseverance to the parents and prevent the children being lost sight of.

The number of nurses specially trained to instruct mothers need not be very great, and experience would probably soon show whether it was desirable that they should be solely devoted to this work, or whether a certain number of specially trained district nurses could carry out the work. Probably the former would be found the more efficient plan.

The records of the results of treatment in institutions for the feeble-minded show that a considerable number are trained to such an extent as to become able to maintain themselves.

The writer from his experience believes, if care such as he suggests could be given during infancy and early childhood,

that these children would come to the feeble-minded schools in a condition much more favourable to treatment, and that many would be so much improved as to be fit to be dealt with by the special backward classes of the Board Schools.

(¹) Written for the Charity Organisation Society of Glasgow.

Clinical Notes and Cases.

A Case of Acute Hallucinatory Insanity of Traumatic Origin. By THOMAS DRAPES, M.B., Medical Superintendent of the Enniscorthy District Asylum.

I HAVE felt some hesitation in bringing the case which is the subject of this paper before the Association, owing to the fact that it came under my own observation only to a very limited extent, and I am consequently almost altogether dependent for the details of the illness on information supplied by others, and those non-professional persons, and principally by the patient himself. But this latter fact has a special interest in itself, as it is not often that a patient can give such a clear account of his experiences as in this instance. However, as from anything I have read on the subject there seems reason for believing that acute traumatic insanity is of rather infrequent occurrence, and as my friend the secretary was somewhat urgent in his appeal for a contribution of some sort, I ask you to accept my apology on these grounds.

Cases of insanity occurring many years after the receipt of head injuries are not at all uncommon. In these cases the injuries as a rule have been severe, and there appears to be a general consensus of opinion that in this class of insanity the prognosis is unfavourable. The very fact of a considerable interval having elapsed between the time at which the injury was sustained and the development of mental derangement, at least suggests the occurrence of slow, progressive, and probably permanent organic changes in the nervous tissues and membranes of the brain, changes which are practically irrecoverable. On the other hand, insanity arising directly out of an injury

which does not occasion serious damage, and occurring in a patient in whom there is no, or but little, predisposition, may be regarded hopefully. To this class belongs the case the few details of which that are at my disposal I now proceed to state. I may say that the patient is a well-educated, intelligent, and observant young man, and his descriptions of his own mental experiences during his illness are in such agreement with what was observed by others that I think they may be regarded as perfectly reliable.

Q—, æt. 36, employed at office work, most temperate all his life, has always been healthy and athletic, almost an enthusiast about games, plays tennis, hockey, golf, etc. Many years ago, when playing football, he got a kick on the left side of his head, just over the ear, and some six months after he began to suffer from deafness, which he attributed to the injury. An eminent London aurist, however, did not attach much importance to this, and seemed to regard the deafness as due to Eustachian obstruction. The disability in any case continued, and for years past the deafness has been very marked, though apparently not increasing. For a number of years he had some discharge from the ears. He comes of a healthy stock. A paternal uncle, and a first cousin of his father, were congenitally weak-minded, but only in a mild degree, and I hardly think much importance need be attached to this circumstance, as the other members both of his father's and his mother's family, and his own brothers and sister, are of a robust mental constitution cool, level-headed, and self-controlled. His mother died of a slow form of pulmonary phthisis. In October last he got a blow ⁽¹⁾ on his head when playing hockey, and the following account of his condition was given by his step-mother, who is also a very intelligent woman.

"He got the blow on his head on Saturday, October 17th. His head was bad on Sunday morning. He got up, however, but had to go to bed about 3 o'clock. That night Dr. G— was called in. He was kept in bed in a dark room until the 22nd, when I first saw him. He staggered into the room, just like a drunken man, going mostly to one side, and if leaning on you he would push you off the pathway. I think it was towards the left he went, but I am not sure. He was very fidgety and restless, unless when under the influence of sleeping

draughts. He seemed to get somewhat better daily (as we thought), and could walk better, but looked very heavy and stupid, and very pale. On November 3rd I took him down to his sister's, in the country. On the night before he had a slight attack of hysteria, for which he was ordered a strong bromide mixture. He travelled first class, and slept most of the time on the cushion, and seemed nothing the worse for the journey. He remained in bed all the following day, but next morning got very fidgety, and wanted to get up. Dr. S—, the family attendant, was sent for, and he considered the symptoms grave, but allowed him up in his dressing gown; would not give him more clothes 'fearing he would get beyond us and go out.' Next day he was up again in the afternoon, but looked very heavy and stupid, and seemed to be losing strength. Dr. S— said there was a slight droop in left eye and that side of the mouth, but it was so slight we could not see it. He also said there was a drag in one leg. On the 7th he was much the same, apparently losing ground. The bowels were very obstinate, and on the 8th, after a restless night, he complained of his head very much, and had a bad pain in his hip. His head grew hourly worse, and he was turning and twisting, and throwing his arms about in great agony. His head was shaved and blistered, and after some hours he got ease. Nurse came next day, and he had to get four doses and a strong enema before there was any effect."

"On the 10th he was delirious, and I think that it was that night that he sprang over the foot of the bed, imagining he saw men coming in at the door. On the 11th he saw two men, one in the wardrobe, the other standing opposite the side window, of which the shutters were shut. He seized his hot water jar, and flung it with all his force at the latter, as he thought, and it went within a few inches of his sister's head, who was sitting at the fire with her back to him. Had he aimed at the man in the wardrobe he must have hit her, and might have killed her."

Dr. G., who attended him during the first part of his illness, has kindly sent me a few notes of the case. "I saw the patient on October 19th, 1903. He was complaining of very severe pain in the occiput. On the 17th he had received a slight knock on the head from a hockey stick. The pain commenced that evening, and gradually increased. On examining him, I

found temperature 100° , pulse 120, tongue very coated, bowels confined, pupils equal. He was very restless, and constantly moving his head about to try and ease the pain. Speech and sight were unaffected, but his ideas were sluggish. No symptom of paralysis present. He was kept in bed, on a K.Br. mixture. The bowels were well cleared out by calomel. Slop diet. At the end of five days his headache was completely gone; his tongue had cleaned, temperature normal, pulse 68. I allowed him to sit up in his room for a couple of hours. On the 24th he said he felt all right, and said he wished to go out for a drive in a cab. This I reluctantly allowed him to do, and I believe he went to see a hockey match. That evening he had a return of the pain in the head, but not so severe. I ordered him some more K.Br.; he slept well that night, and next morning the pain was better. He stayed in bed for three or four days, when all symptoms again disappeared. He was then allowed up and told to keep quiet, not to read or write, etc. On November 3rd he was allowed to go to the country, as he had been free from symptoms for some days. I strictly enjoined him on his arrival there to go to bed and take some of the K.Br. mixture, and to remain quiet for some days. My diagnosis was 'concussion,' not severe. There were no symptoms of fracture or compression."

I saw the patient myself about a fortnight after the mental symptoms had appeared. He had no fever; his pulse averaged about 80, and occasionally was slightly irregular. He was feeble in his limbs, and uncertain in gait, the right leg dragging slightly, and he required some assistance in walking. When in bed there was a good deal of rather strong muscular twitching in left arm and left pectoral region, and occasionally in the right. Reflexes rather exaggerated. He recognised me at once, and had been looking forward all day to seeing me, and he conversed on the whole quite rationally. At times, however, an irrelevant remark would slip in, and his mind would wander a little. I remained with him next day, and as a rule so long as I kept talking to him, or held his hand, his mind seemed to work on normal lines. But if left to himself, after a very few minutes he would begin to talk to himself, and frequently raised himself slowly in bed, with a fixed far-away look in his eyes, as if he was seeing a vision. Two or three times the pattern of the down quilt (flowers), or a particular spot on it

would arrest his attention, and his eyes would become rivetted on it, and he would gradually steal his hand towards the spot, and then suddenly make a grab at some supposed object. He told me afterwards that it was at these times that he saw the dogfish, referred to in his own narrative, wriggling up his bed. The quilt had eventually to be removed, as he imagined the flowers on it were animals, and these used to irritate him. When his jar was replaced by a hot-water bag, he said it was a dogfish. He often heard music, bands playing, etc., and could not understand why I and others could not hear it as well as himself. On one occasion he thought there was a military band on the church steps (the church was near the vicarage where he was staying), and he said to his brother-in-law, "Don't you hear the music? [such and such tunes] No? Oh, man alive, you are getting deaf, you should go to one of those ear chaps." All this time his own hearing was much more acute than normal. He could hear the church bells plainly, and vehicles coming to the door, and even the tiny bells on the collar of a little toy terrier. As he got better, the deafness gradually returned.

His progress to recovery was very gradual, but steady, and his mind had got quite sane and normal by about a week before Christmas; but he remained rather weak, and unable for anything more than very moderate exertion for some time after this. A trip to the Canaries restored his health greatly, and he was able to resume work on his return home. I asked him whether during his illness he was ever able to distinguish between the real and the unreal, and his reply was:—"Everything that occurred to me was as real as eating my meals and drinking my medicine. I could not believe I had any hallucinations. When sitting up one day with B— [his brother], he tried to persuade me it was all imagination about seeing strangers in the room. I turned to him and said—'Why, at this present moment I could point out some to you. Do you mean to say there is not a man over there?' pointing near my bed. He said no, and walked over to the place indicated; as he did so the man disappeared. A few other similar incidents occurred. I have never thought of saying anything to B— since about it, but I don't think, and it never struck me as possible, that this could also have been an illusion. I am pretty certain it actually happened."

I will now give some of the patient's own impressions of what he passed through during the period of mental disturbance.

"On Saturday, October 17th, 1903, I got a blow of a hockey stick on the top of my head, but did not think anything of it, and played on for forty minutes. On Sunday morning I was a bit headachy and did not go out, but painted the inside of a greenhouse. Headache got gradually worse, and on Monday was very severe. The next three nights I did not sleep at all, and I got pain in small of back which alternated with the headache, one disappearing as the other came on. The following Sunday I went out for a short walk, but was rather shaky, and could not walk straight. The Saturday after that (31st) I drove to the Phoenix Park in carriage, and stood watching a hockey match, and was none the worse of the exercise. On Tuesday following (seventeen days after the accident) I went down by rail to the country (sixty-one miles). After going to bed that night I do not remember anything until, as I judge, some time in the following week, when I began to see dreams which were as real to me as events happening in ordinary life, of which the following are samples :

"Nurse was left in sole charge of me at night. She was very fond of theatricals, and managed to transport me with herself up to some place outside Dublin. I found myself lying in a sort of gipsy travelling van, in which were also some others, in the middle of the night, more or less hidden under hay from the police who were searching for my companions, none of whom I knew except nurse. Several shots were fired by police with noiseless rifles, but none of us were hit. We were then allowed to proceed in our van, which was drawn up near a house which turned out to be a theatre. I was brought in my bed and laid behind the scenes. After the play was over I asked why we were not making a start for home, as it was after midnight, and I knew we had a long journey to go. I could get no direct answer from any of the actors and actresses (who were all in costume), but I made out that there was a bad house, and consequently insufficient money to pay our railway fares. After considerable talking and drinking we found ourselves on board a train somewhere between Balbriggan and Drogheda, and shortly after we reached nearly to Harcourt Street Station. Tickets being required here, and not being

forthcoming, our reserved carriage was shunted into a siding. I was getting anxious about how we should reach home in time, but nurse would constantly assure me that if I only would keep quiet everything would be all right. It seemed the railway fares due would be £20, and I offered to pay £10, which with what the members of the company had would nearly make up the amount. This was refused, as nurse said it was no business of mine. No solid cash being forthcoming, the ticket-checker and a porter took counsel together, and decided to test the voices of the different singers, and if they proved to be really operatic singers of a first-class quality they would on the strength of this be allowed to finish their journey. Each member was then made to sing a song, and the checker took down their names as each passed his test. After about a dozen had passed the trial finished, and our carriage was shunted off to the main line. I then fell asleep, and on awaking found nurse and I had arrived at our destination, the others having branched off to Cork and Limerick."

"At night, when all the others had gone to bed, I found that the portion of house containing my room was really detachable, and was supported on wheels. It was capable of being driven about the country by engines worked by steam, and also on water; the engines being situated under my room. The whole centre of the house was taken up by a large amphitheatre. There was no audience, the centre of the floor portion being filled with a large orchestra, and the seats all round being fully occupied by the singers, of whom there were probably a thousand. Just before my portion of the house was to be detached the orchestra and choir would commence some fine operatic music, so that the noise of undoing the bolts which fastened the two portions of the house together, and the rumbling of the wheels on our departure should not be heard by the rest of the house. We would then start off slowly down the hill to a lake, or rather flooded fields, at the back of the house where I was staying, our conveyance now working as a steamer. After some travel we arrived at a place which I took to be near Paris. This district was in the hands of a society who had powers of life and death over all who found themselves there. I and three others were placed in glass coffins which were then put into a glass hearse. We were lying on our faces, and could not change our position, which was such that we could see all that

was happening both in front of us and at one side. Before starting I was asked to join this society, but said I would not join any society without knowing exactly what I was being let in for. I suspected it was a sort of Nihilist body. I was then told what would happen to me if I persisted in my refusal to be carted to my fate after I should first be shown others being put to death. There were several similar conveyances in front of me, each being drawn by a pair of horses, as was my own. The road traversed was a very high one, and on left side was a steep cut—the surface being of concrete—about a quarter of a mile along road, and about one hundred yards downwards. At the bottom of this was a tremendous furnace about fifty yards by ten. When the first carriage came opposite this the horses were unharnessed and the carriage (or hearse), containing a number of people who had refused to join the league, was overturned, and the occupants, not being able to stay themselves, slid down into this enormous fire, and were burned to death before our eyes. The other carriages in turn were brought to the same spot and overturned also. Our carriage then came up, and the horses were unharnessed. I was again asked if I would become a member, and on refusing the carriage was tilted up on one side, but was held back just as it was about to overturn. We then drove on a little further, and the same thing occurred again, only instead of a fire there was a large tank of molten lead into which the people were cast. As this had not the effect of converting me the carriage drove on over a very rough road, behind a couple of others which had passed us, and as these carriages came up to a point where the road overhung the river, the soldiers who were waiting there overturned them. Some of the people tried to escape out of the opposite side of the carriage, but were immediately killed by the soldiers. Some of those who were thrown into the river swam along in the hopes of being able to land, but as each man or woman tried to catch hold of the bank he was bayoneted. Numbers of others preferring to let themselves drown in mid-stream sank before our eyes. Our carriage was then brought and heaved up, but was prevented from falling over after I had given up all hope of escaping. We must have gone a circuitous route, for after this last danger was passed the carriage only went a short distance before I recognised we were at the point of starting. We got on board the steamer, and shortly reached land

at the back of the vicarage [the house where he was staying], where a horse was ready to draw us up to the house. As we came up I could hear the singing as when we started, and our rooms were slipped quickly into their place, and bolts fastened without anyone having heard of our absence."

"In the room in which I was lying there was a man on a seat right up at the top of the ceiling over the door. This man would tell me the different things that would happen to me if I would not join the league. He had a large rod in his hand with which he would point out any objects to which he wished to draw my attention; for instance, on one occasion he told me that one of my legs would be cut off. When I pretended not to believe him he would point with his rod, and on following the direction of it I saw a man standing, guarded by a few armed men. Just when I saw him one of the guards drew his sword and cut off his leg at the thigh, and threw it into a basket in which was an assortment of arms and legs and bits of trunks cut off other people.

"At other times the man in the high seat would flick a piece of paper folded up into a square of an inch in size, in which he would have written some order for me to carry out. Sometimes these would fall outside my reach, and then a dogfish would take it up in his mouth, and wriggle up the bed, making a grunting sort of noise to attract my attention. This fish was a horrid, dirty thing, always dribbling foam like a mastiff, so I did not at all like putting my finger in his mouth to scoop out the note."

"One day (or rather night, I suppose, as I do not remember seeing full day-light at any time, and the various places I went to were almost always lighted artificially) I found the room, which was a long and rather narrow one, was lined with a row of soldiers at the far end. In front of the soldiers were men, women, and children, who were being tried as spies by a judge seated in a high seat over the fireplace. A man's name being called, he stepped forward, and one of the soldiers commenced to call out the indictment against him. The judge pronounced him guilty, and a soldier immediately bayoneted him where he stood. The next case was a similar one, and the man met a similar fate. The third case was that of a little girl about eleven years old, and when only a few words of the charge against her were read the judge pronounced her guilty, without allowing

her to say a word in her defence. A soldier then pushed her forward—and cut her body in two with his sword. This was more than I could stand, and as I was unarmed, I tried to see if there was a chair or any heavy piece of furniture within reach with which I could stun the nearest man, and perhaps be able to seize his rifle and revolver before any of the other men forming the guard could shoot me. I could not see anything suitable for my purpose, but at last thought of the earthenware hot water jar at my feet. This I carefully pulled up with my feet, gradually so that they would not notice what I was at. When I did get it in my hands I was disgusted to find there were two jars tied together by the necks. I had no knife to cut the cord, and no time to open it, so I jumped up straight in bed, holding one jar in each hand over my head, and flung them both with all my might at the head of the man I had aimed at.

“Everything immediately turned blank when I struck this man.”

[This was the occasion referred to in his step-mother's account, when his sister had such a narrow escape, the jar having whizzed by within a few inches of her head.]

“On one occasion we found ourselves scaling with difficulty the heights leading to the vicarage, the ascent being very rough, and planks having to be used to get over some of the parts where snow lay heaviest. We succeeded in getting into the vicarage by means of a ladder through one of the top windows.

“We found the vicarage was full of rebels, and it was fortified by them against a number of bluejackets and police. The former were under the command of an admiral whom I did not know, though I knew that H— and A— [sister and her husband] knew him, and the latter were in charge of the local D.I., and H— constantly assured me that the latter would not let anyone attack us, as he was a great friend of ours. This was at night time, and it was pitch dark. Outside, the police and man-o'-war's men were patrolling the woods in a gradually decreasing circle, so as to prevent any of the rebels escaping. Their band was playing all the time ; sometimes it appeared very loud when it got near my window, and would then die away so as to be inaudible when it got to the opposite side of the house. The band was being played with the double object of terrifying the

rebels and encouraging us, but I was always afraid they would never close the circle in time to save us before the rebels would shoot us down. Meantime we were in my room, sitting round the fire on chairs. The attack was to come from our right hand side, in fact it was the only point the rebels could be attacked from. The rebels themselves were in room and passage on our left, so that if the blue-jackets fired on the rebels they would be practically certain to kill us. They opened the shutters and forced us to keep a bright lamp burning over chimney-piece, so that the attackers must see there were women in our little party, which was composed of A— next to the rebels, then myself, H— and F— completed the circle round fire in order named. When A— told H— not to pull her dress out of the way of one of the rebels who wanted to get a shot out, the rebel forced his bayonet through the lower part of A—'s thigh, and when he persisted in his objections, he would give the bayonet a twist. This of course was excruciating agony to him, and I could see the blood flowing down the leg of his trousers. He tried to hide this from H— by casually dropping his handkerchief over his boot to hide the blood, but he could not speak with the pain. Gradually the circle of the attacking party was getting smaller, and some of the rebels were trying to slip off, but I believe any that got outside were killed. Suddenly the band stopped, and a party of sailors got in through the roof, and rushed through the house, hacking down with their cutlasses every rebel they met. Our relief was tremendous when we saw the last of these cowardly blackguards cut down. Daylight broke ; there was nobody but myself and nurse in the room, all the others having gone to attend a thanksgiving service in the church. After service the band played 'God save the King,' and some other pieces of a martial character. I could not hear them distinctly; they were playing on the church steps, at the large door at west end of the church. I begged nurse to let me get up for even half-a-minute to see the fellows who had so bravely rescued us, and I felt extreme disappointment when she refused my request.

"I was lying in bed one evening when I was asked to get up and sit by the fire. They put a dressing gown on me, and wrapped me up in a blanket, and seated me in an armchair on the right-hand side of the fire. There was a large battery fitted into wall on my right, but hidden by a door covered with

the same pattern of paper as rest of wall. I did not want to go there at all, as I knew the battery was under the control of those blackguard rebels who would give me most fearful shocks, and, as likely as not, kill me, but as T— [the writer] said it was better for me to sit there I did so, as I believed he had perhaps some knowledge of which I was ignorant, and in any case I had absolute trust that he would only do or say what was best, though whether he meant that I would be saved, or that my death would save all the others, I could not determine, but I had sufficient confidence in him to take his advice, though I knew that I would most certainly be tortured. There was a screen hung from the chimney-piece, between me and the fire, and on this was a piece of embroidery in gold, of a circular shape, and about a foot in diameter. At one point of the embroidery there was a single leaf, like an oak leaf. The embroidery kept going round in a circle. Just over the screen there was a revolver pointed between my two eyes. It was highly burnished, and had a barrel about 8 inches long, which flashed brilliantly in the light of a bright lamp just above it. I knew that if I refused to join the League I would be shot by the revolver as soon as the leaf came to the bottom of the circle, but as I had made up my mind not to become a member I refused to answer their questions, and tried to keep calm and not feel afraid, or, at any rate, let them have the satisfaction of seeing that I was afraid. The leaf fell, but the expected shot was not fired. I was then told the leaf would go three times round the circle, and would then fall straight from the top, and as soon as it would touch the bottom of the circle my last moment would have come. The circle then began moving slowly round again, and when the leaf reached the top the third time it slowly fluttered down. My attention was again drawn to the revolver by one of the men who was hiding behind my armchair, but I refused to give any sign, and when the leaf reached the edge of the circle the pistol did not explode, as I fully expected it would.

“Next, the door of the battery, which was about 18 inches long and 10 inches wide, was opened, and some connecting wires were pulled out by a man reaching from under my chair. These he tried to attach to my naked feet, and I tried to avoid him by getting the blanket between the soles of my feet and the wires without letting him know. I was successful in this,

and he seemed greatly surprised when he turned on the current to find that I did not appear to feel the shock. However, he discovered what was astray, and got the wires attached to my bare feet. I tried to avoid them by pushing back my chair, but he would shove it forward again into position. The current was then turned on and I could not stir. I still refused to join, and when the current was turned off the flesh was burned off the soles of my feet. My chair was then put more in middle of the room, and without turning my head I could see a man on my right with a bayonet pointed at my chest. He said : 'This is your last chance ; will you join ? It is only a nominal thing, but you must become a member.' I did not answer, but turned my back on him, and then I found another man, who was hidden behind my chair, was pointing a heavy revolver at my left temple. I resolved not to mind either of them, and after a while they evidently gave up their present methods, and left me alone."

[I asked the patient after he recovered if he had felt actual pain in his feet at the time he thought they were burned, and he said, yes, horrible pain, but that it was more of a cutting than a burning character.]

"We were seated in a court lighted by lamps. I was on a bed or couch, and the other members of the theatrical company to whom I have already referred were seated on chairs amongst a fairly large audience. I think we were being tried for not having paid our railway fares. Before the trial commenced there was some sort of a musical performance. There were three little girls æt. about 12, 10, and 9, who danced like fairies, they were so pretty and graceful. Immediately the judge was announced these three girls were transformed into birds and perched on a high ledge. I was lying near the door which was on my left-hand side, and it was guarded by two men with drawn swords in their hands. I was very anxious to try and rush the door by knocking down one of the men and snatching his sword, with which I hoped to do away with the other man before he could get at me ; but nurse again told me if I would only keep quiet it would be all right—that I was not really affected by the case at all. I did stay quiet for some time, but after a bit I thought there was a possibility of escape, so I sprang at the man, knocked him down, and got hold of his sword, with which I disabled the second guard. There was a

desperate row, and I tripped over something and fell against a lamp which was outside the door. This left the hall in darkness, and everything seemed to vanish."

"These three children of nurse's were rather a source of wonder to me, in that though she was not married, F— made no objection; in fact, on the contrary, they took a lot of trouble with them, and every evening for some time they were regularly tubbed in my room. F— and H—, and sometimes B— or A—, formed a ring sitting in chairs round the fire with their backs to me, and the horse with towels on it completed the circle on my left-hand side. I could, however, see H— stooping down to wash the children one by one, and as each was washed she was passed on to F—, who dried them with a towel. Sometimes the youngsters would try and peer round the corner at me, but if they thought I saw them they would scuttle. Each child then in turn said a short prayer on their knees before F—, and ran off out by the door to their own bedroom. This was with the object of saving nurse trouble, and was always finished just before she appeared for night duty. I found out at this time that nurse was an islander, and her daughters were more or less of the mermaid description. They had a most marvellous way of assimilating themselves with surrounding objects. If there was a cushion on a chair they could make themselves up into the shape and colour of it, so that you could not tell but that there were two cushions on the chair. They would stop absolutely still this way for a long while until they believed I was asleep, and then they would uncurl themselves and begin playing like ordinary children; but if I opened my eyes they would form themselves maybe into an extra bar to the back of the chair or an extra leg to it, and be quite undiscernible from it until they moved.

"The three children would sometimes get turned into birds, and would perch on the back of my arm-chair when I was sitting in it. I stroked and petted them on the quiet, as they were always punished by being shoved into a sack if caught. Sometimes they were put into my pillow, and one of them would tell me I was lying on her; then I would change position of my head to ease her, and try to open the pillow-case to let her out. When I spoke to nurse about the cruelty of putting them in my pillow she took up the pillow and shook it well, at the same time hitting it hard with the palm of her hand, as women

do when they are settling a pillow. The unfortunate little birds squealed at this hard treatment, so I never said anything more to her about them, though I often tried to let them out, and always moved my head when they told me I was hurting them."

"Another time there were a number of us put into coffins with glass tops and sewn up into shrouds so that no part of us was visible—we were drawn up in front of a metal screen—just as I was sewn up one of these little girls gave me a needle and a bit of red thread, but she could not speak to me or she would have been killed. I found out afterwards I should have sewn a little bit of this thread into my shroud while slowly passing through the screen, but not knowing what to do I kept the needle and allowed a little bit of the thread to appear through where the joining of the shroud was. It was a regular inquisition sort of trial. One of those who were up for trial was made to stand on the opposite side of the screen, and when a coffin was shoved through this person was called upon to identify the person in the coffin without opening shroud, though he or she might touch the confined person.

"The screen was raised sufficiently to pass us through. The person in front of me was killed with a blow of a cudgel on the head, his body being thrown into a little stream hard by where were a number of other carcases; these latter were gradually being carted off in a wheelbarrow by a man. While waiting my turn I was somehow or other able to see what was going on, and to my horror I saw H— lying beside the stream, her head half in the water and a horrid wound in the side of it. She was trying to raise herself and get up, and if she succeeded she would be allowed to go free, but though I strained every sinew to go to her aid I could not move an inch. Then my turn came, and an old woman was called upon to identify me. I had never seen her before, so never expected she could know me, but after a little hesitation she said 'That is Mr. Q—, of Balbriggan.' I was immediately released and went and helped H— up. A— just then appeared, and we went through a steep, low tunnel to a place where we had been landed before—near where that mortuary was—found our 'motor ship' there, and got home all right."

The incidents, as related here by the patient, which are not unlike what we sometimes read in works of imagination or

romance, are remarkable for their great vividness and coherence, and for the strong impression which they made upon his memory, so that even now, five months after their occurrence, they are still fresh in his recollection. As he said himself, they were as real to him as events happening in ordinary life. In subject matter, and mode of presentation, they resemble the phantasmal creations of dreamland far more than what is ordinarily observed in cases of hallucinatory insanity. But they differ from these in that while he was the subject of them, instead of being sunk in the so-called unconsciousness of sleep, he was broadly awake. They differ also in that while mere dreams, unless the somnambulistic state be included, never, or rarely, incite to action of any kind, the illusory phantasms which beset his consciousness prompted him on several occasions to very striking displays of motor activity, one of which at least might have been attended with very tragic results. Again they differed notably from dreams in that what may be called normal consciousness—that which is compounded of healthy object- and subject-consciousness—again and again asserted itself, and alternated and frequently co-existed with the hallucinatory state. In fact, there was hardly a single day, even when he was at his worst, that he had not intervals of apparently almost complete sanity. It was this fact especially which led me to take a hopeful view of his case, and to venture to predict a favourable conclusion. The facts seemed to indicate that the process of dissolution was of a very moderate extent, and had not penetrated to any great depth. No two mental cases are precisely the same, but in an article in *Brain* (vol. xv, p. 85) Dr. Mickle gives the outlines of a somewhat similar case, where a female was the subject of acute hallucinatory insanity, the result of an injury to the head from a blow of a poker, where “vivid hallucinations of sight and hearing, and of hostile import arose; also delusions of being jeered at and tried for crime . . . delusions of impending evil, and of the complicity of persons about her in an intended perpetration of (physically and mentally) cruel brutality.” But this patient passed into a state of melancholia with suicidal attempt and violence.

A case such as that under consideration suggests some interesting problems, to which I fear, however, it is only possible to offer a conjectural solution. What in the first place may we

suppose was the nature of the lesion which led to the derangement of mind? Would concussion alone (which no doubt may have followed the injury), causing a greater or less molecular perturbation in the delicate nervous plexuses of the highest cortical centres, be a sufficient cause? It is possible, but hardly to be regarded as probable. On the other hand, the gravescent headache, accompanied by at least a certain amount of acuity—if not actual hyperæsthesia—of hearing, with the slight paretic phenomena, muscular twitchings, irregular pulse, and insomnia, suggest meningitic trouble. If I were to hazard an opinion, I should be inclined to the view that there was a localised meningitis in the first instance, and that the inflammatory process extended by contiguity to the superficial layers of the underlying cortex, but not to any great depth. The gradual march of the symptoms from at first purely physical manifestations to, eventually, very decided mental derangement, would seem to consist best with such a supposition.

But what is of more interest to the psychologist is the bearing of such a case on that great question—a question which in its importance may well rank beside Darwin's "problem of problems"—the nature of consciousness, of personality. According to the old ideas, human consciousness or self-consciousness, personality, the ego, was regarded as a sort of essence pervading our being, single and indivisible, to which the phrase *semper eadem* might properly apply. According to more modern ideas, this view is considered as no longer tenable; and the psychology of the present day would seem to regard consciousness, that is the feeling of general consciousness, and of personality, as, like will, merely an abstraction denoting the sum total of a vast number of separate consciousnesses, of which the general consciousness is the product. Every impression that reaches our senses from the outside world, every afferent current that reaches the cortex from our internal organs, produces some change or modification in the general consciousness, which is thus, as has been already remarked, the outcome of our subject- and object-consciousness, acting conjointly. And, consequently, our so-called personality, the ego, so far from being changeless and indivisible, is in reality never the same for any two consecutive periods of time, however short. Moreover it is, I think, universally admitted that every present state of consciousness is intimately inter-

woven and blended with the memories of innumerable past states of consciousness, with which it is indissolubly combined by bonds of association. So much so, that it is absolutely impossible for the mind to enter on any new phase of consciousness without the simultaneous re-vivification of many previous allied phases. This associative process must be supposed to follow the general laws of evolution which influence the whole nervous system. In accordance with these any process, novel at first, and attended with more or less vivid consciousness and effort, by frequent repetition becomes easier, more automatic, affects consciousness less and less, until, when it has become completely "organised," it occurs without any consciousness at all, and takes its place with the purely reflex mechanisms. Myriads of these reflex associative operations are in constant activity in the brain, and form the ground-stuff and basis of all intellectual work. They have, I think, somewhere been compared to the permanent officials of a vast and complicated system, subordinate to, used, guided, and controlled by others of higher rank, who, however, are absolutely dependent upon them for the efficient discharge of their own functions. The highest centres or neuronics systems in the brain-cortex exercise supervision and control over the lower, more mechanically working subordinate centres, and should anything occur to render the former inactive we can readily conceive that the lower centres, missing their guidance, would be likely to work somewhat irregularly and uncertainly, like an untended machine, and if the paralysing influence in the higher regions be severe or long protracted, we can imagine that these subordinate centres would tend more and more to drift into a state of absolute anarchy. This is, of course, a mere piece of descriptive analogy, but it is, I think, consistent with facts, and with the views held by most of our ablest psychologists. The descent from the highest level of healthy neuronics function down to this anarchic condition of lower centres is represented symptomatically by a downward gradation of many stages from normal ideation to absolute incoherence.

Now, it is a fact that when the highest centres are thrown out of action, and the state of consciousness usually co-existent with their activity becomes for the time obliterated, lower centres, whose operations are under ordinary conditions unattended with consciousness, when the inhibitory action of their

governing centres is removed, themselves now assume the rôle of these higher centres, and appear above the horizon of consciousness, and an altered personality, a new ego as it were, is the result. Should these in turn become inoperative, other centres of inferior rank take their place, and so the process of progressive dissolution of successive higher centres, with increased and now conscious activity of lower centres, may advance through the entire series until the lowest limit of dissolution is reached. The hypnotic states furnish abundant instances of altered, or as it is more usually termed double or multiple consciousness, which is no doubt due to a condition of things such as I have endeavoured to outline. And there need be no surprise at there being any number of different personalities in such conditions, for it is probable that for every stage in the process of downward dissolution there is a different consciousness and personality, which in each case is representative of the activities in operation in the last denuded stratum, or strata, of cortical nervous mechanisms.

Sleep in its most complete and healthiest form is deep and dreamless, and in this condition we must postulate a state of inaction and sopor in *all* centres, higher and lower, whose activity is usually, or under certain circumstances may be, attended with consciousness. But sleep is only a relative term, a matter of degree. Some centres only may be inoperative, others may be still more or less active, in fact awake. As a French physiologist has well expressed it : "*Le sommeil général est l'ensemble des sommeils particuliers.*" And so dreams are possible—and explicable. They are due to the activity of subordinate centres, relieved from the control of those above them, the former being thus free to weave from their content of stored memories polymorphous fabrics of very varied character, pleasurable, horrifying, or fantastic.

While sleep, whether accompanied by dreams or not, is probably the result of fatigue of, with perhaps the superadded effect of fatigue products on, the higher centres to a variable depth, delirium, such as that which occurs in ordinary fevers or in acute delirious mania, is probably the result of all the ideational centres and others being simultaneously attacked by the toxin or toxins circulating in the blood, all being more or less put out of gear, and few if any left intact, and the result is incoherence, the associative mechanisms (which are the basis of

their creative and combining power) of neuronic plexuses of higher and middle rank being completely in abeyance, and only random associations and disconnected memories reveal themselves in the patient's wanderings. These are extreme instances, and between them hallucinatory insanity may be regarded as occupying a middle place. Here, although there seems a tendency on the part of some recent authorities to assign a prominent part to the action of toxins in many forms of acute insanity, not merely the delirious variety, I hardly think that they are a factor, and certainly not to any large extent, in the causation of, for instance, such cases as that which I have brought under your notice to-day. It seems scarcely reasonable to suppose that a poison with which the blood is saturated, and in which the entire brain is almost literally bathed, should select merely a very limited region of the cortex on which to exert its baneful influence; even while we are prepared to admit that according to their powers of resistance different centres are morbidly affected in different degrees, the higher most, the lower least. A much more probable hypothesis is that which I have ventured to give, *viz.*, that a process of superficial inflammation, not of any great intensity, propagated by contiguity from the meninges to the upper layers of the cortex, threw some of the higher nervous mechanisms out of action, whereby the lower ones, or some of them next in rank, were "let go." That even the highest were not wholly disabled is shown by the fact that normal, or highest-level, consciousness was present to such a decided extent throughout the illness, and frequently co-existed with, although it was more or less suppressed and overshadowed by, a lower-level phase. And what I would submit is that the more trivial the injury, the shallower the depth of dissolution, the fewer association systems impaired or dislocated in their operations, the greater rationality and coherence, the nearer approximation to normal consciousness we may expect; whereas, with graver mischief, greater depth of disintegration of neurones and their associative connections, the more is the patient's normal personality eclipsed, the more irrational and disconnected are his ideas, until the lowest limit is reached in which incoherence is absolute—in fact a condition of dementia, where personality, properly speaking, can hardly be said to exist at all.

Why, it may be asked, was the hallucinatory condition so much more vivid and real to the patient than ordinary dreams which it so much resembled? I think the explanation lies here. Both dreams and hallucinatory states of the mind are probably due to the activity of some centres below the highest, and, on an average, of similar rank. But in dreams these centres, possibly only half-awake, not absolutely uninfluenced by the soporific process, are in a condition of only moderate activity—the degree of course varies in every case, but we can hardly suppose there is ever an excess of activity,—while in the case of vivid hallucinations there is reason to believe that owing to irritative action, for instance of a neighbouring lesion as in this case, there is over-activity in the affected centres—the increased acuity of hearing suggests a parallel. This would have the effect of enhancing the abnormal low-level consciousness, and making it equally, if not positively more real to the patient than the normal consciousness which still existed, but proportionally dimmed. I do not see how the facts can be otherwise explained.

Delusions of persecution, of plotting and conspiracy against life and property—how common a phenomenon in different forms of insanity, mania acute and chronic, melancholia, paranoia. How can the frequency of this phase of consciousness be accounted for? It would seem as if the mental groundwork was the same in large numbers of human beings. All insanity being a reduction to a lower level of consciousness and associations, can it be that these particular delusions are of ancestral origin, are, in fact, a reversion to certain experiences of the race in a past long dead and buried? During savage and barbarous stages of human development there was a constant struggle for existence; every man carried his life in his hands, never knew where or when he might be attacked; he was in constant danger, and had to keep wary and vigilant, expectant of an assault from some foe at any moment. In such conditions of life it would hardly be possible that numberless associations of ideas and feelings inspired by dread and suspicion would not be formed. And these, having originated at a very early stage in human development, would be some of the most fixed and deeply rooted, most organised, and most permanent of our mental equipment; and although at the present stage of development, under normal conditions, submerged in the depths of

our psychical life, they would be liable to reappear in consciousness whenever the superimposed association systems of more recent origin by which they are overlaid and, so to speak, smothered, fall into inaction. I merely throw this out as a suggestion, believing that the supposition that some delusions at least may really mean a reversion to some primitive and ancestral states of consciousness is consistent with the proved facts of evolution.

In conclusion, I may observe that the ideas embodied in these remarks are, no doubt, to the greater number of the members familiar as household tales, but they may serve as a peg on which to hang some discussion, which may be of more interest than its evoking cause.

(¹) The exact site of the injury was on vertex, a little to right of middle line and about two and a half inches back from frontal edge of hair.

DISCUSSION

At the Meeting of the Irish Division, 27th April, 1904.

Dr. CONOLLY NORMAN asked: Did the recovery of hearing which took place during the hallucinatory period continue after recovery?

Dr. DRAPES replied that the deafness gradually returned, and patient went back to his former condition.

Dr. CONOLLY NORMAN, continuing, said it was a curious and interesting fact in the case, that for a considerable time the patient had the power of concentrating his attention when addressed, and replied rationally, afterwards, when left to himself, falling into the condition of dreamy hallucination. He thought the case hard to explain on Dr. Drapes' theory of stratification of the mental faculties. If it was true that when the action of the higher centres was removed the lower became inordinately active, how did it occur that the man at his worst, when asked a question, could reply? He considered that the prognosis had been very wisely founded on the fact that the patient had never quite lost his sense of personality, and this distinguished his romances from the ordinary romancing of the paranoiac, which often involved the sense of reduplicated personality, described as an unfavourable sign. The hallucinations about moving objects, such as dogfish, were curiously associated with notions of bloodthirsty scenes, such as dismemberment, because this association occurs frequently in cases of alcoholic insanity, though in this case there was no suspicion of toxic origin. The patient seemed to have had delusions, and perhaps hallucinations, leading him to think, and perhaps to feel, that he was being carried about. The speaker was inclined to think that these hallucinations originated in the muscular sense. They were of interest although not very common, because they form the basis of some ideas, which used to be more frequent, of being transported from place to place, *e.g.*, the witches on their broom sticks. As regards the origin of ideas of persecution, besides the forms of emotion the exaggeration of which produce maniacal and melancholic states, etc., we must admit that there is a distinct emotion of suspicion which results in delusional persecution, and that this is an emotion perfectly different from the general dread of the melancholiac. He was inclined to look for its origin in a dissolution of the higher faculties of the mind. It was a dissolution of the social sense that leads people to trust each other, and in the insane that disappeared and the instinct of self-preservation appeared.

Dr. RAINSFORD said that with regard to the sensation of movement, it might be analogous to the condition met in certain cases of peripheral neuritis, in which the patient had the sensation of having undergone severe physical exertion. He had frequently noticed that a large number of so-called delusions had a physical basis, as a patient who has pains in his limbs having the sensation of having done work.

In Dr. Drapes' case some abnormal muscular sense would develop the consciousness of being moved about. There was also an analogy to be drawn between this abnormal consciousness or knowledge and the way in which fever patients will revert back to ideas they had, or things they knew, in childhood, and he referred to two cases reported by Sir William Hamilton, one of which was that of a Jewish servant who recalled the Hebrew tongue whilst under the influence of fever, and the second a native of Brittany who recalled the Breton tongue in the same way. The extraordinary consistency in the patient's hallucinations he considered very remarkable: each of them was a complete tale in itself.

Dr. EUSTACE gave some particulars of a case of acute mania, plus the results of hyoscine. Recovery took place in five weeks. During her mania the patient always felt as if being pushed out in a boat in Kingstown harbour by a girl in a red tam o'shanter. The hallucination seemed to be very real, as she always clutched at anything near her, and held on to the doctor or nurse.

Dr. LEEPER asked Dr. Drapes if he thought the condition of the patient at all simulated the condition of general meningo-encephalitis, a sort of general fever as a result of traumatism. Also whether he thought the surgical condition had caused the mental trouble.

Dr. DRAPES, in replying, said that there was some temperature at first, but it quickly disappeared. He supported his theory of stratification of the centres, and compared it to drunkenness in which there must have been a sane condition to begin with. As to the hypothesis of reversion to primitive ideas, he said our social feelings were some of our highest centres, and there was always a dissolution of these allowing our primitive ideas to become prominent.

Report of the Committee of the Medico-Psychological Association appointed to consider the Case of Double Consciousness.—Presented by ALBERT WILSON, M.D.

1. The Committee, some of whom approached the case in a sceptical attitude, agree that the manifestations in this case are undoubtedly genuine. They arrive at this conclusion after a long and careful examination, both of the history of the case and of the patient herself.

2. The patient has undergone changes of personality, some complete and some incomplete; some sudden and some gradual. In some of these states she was totally, and in all partially, ignorant of her life during the other states. Previous to her illness at Easter, 1895, the patient was to all appearances healthy in mind and body.

3. In some of these states she completely lost acquirements which had become easy in other states; such as drawing, writing, and nomenclature.

4. In other states her sense of discrimination was enormously increased, such as the tactile sense, brought out in relation to the copying of drawings or words, when blind.

5. In these different states some of her normal faculties and powers also were lost, either suddenly or gradually, returning

to their functions in a similar manner. This applies especially to paralysis of the feet and more rarely of the hands. Her sight also left her suddenly, without revealing any change by the ophthalmoscopic examination which was made by Mr. Tweedy. It also returned suddenly at intervals for very short periods. Her speech and hearing were also affected. At other times her intelligence disappeared, and she became imbecile.

6. The Committee consider that her newly-acquired faculty of drawing when blind, especially being aided by touch alone, is a very remarkable occurrence. The same remark applies to her reversal of ideas, substituting complementary colours, and writing from right to left.

7. Her disposition and character in some states were widely different from what they were in others. In her present state, which is abnormal, she is kind and of high principle. The same was the case in one or two other states. Whereas in one state she was like a very naughty and wilful child; in others she was cruel, vicious, thieving, destructive, and even homicidal. At these times she was uninfluenced either by argument, persuasion, or suggestion, whilst every threat of physical punishment provoked hostile resentment.

8. Her handwriting was distinctly altered in some of the states, and we could discriminate three or four types: (1) a badly-formed handwriting, when she wrote backwards; (2) an illiterate scrawl when in the imbecile state; (3) three allied handwritings when in three somewhat related but different states.

9. Associated memories.—The Committee specially emphasise the following conclusions: That the continuity of her memory extended throughout the various occasions and periods of any single state. While she was in any one state, her memory extended to those occurrences only which she had experienced while in that state, either in the interval then current, or in previous intervals. To occurrences in the intervening periods, when she was in other phases, her memory was a blank. For instance (a) she changed from one abnormal state (B 3) during her dinner on September 20th, 1896. This state did not recur till April 4th, 1897, about the same hour of the day. She was quite ignorant of all the intervening events and wished to finish her dinner of September 20th. (b) On another occasion she changed at 9 p.m. on December 29th, 1896, and did not return to the same state until the

evening of May 13th, 1897. Her memories on the latter date were associated with the features of December, *viz.*, lamp-light, snow, and an absence of flowers. The occurrence of daylight and flowers were quite a shock to her, while all the events of the past five months were obliterated. At times she would explain this condition as having fallen asleep and awakened again.

10. Examining the sensory system, there is no report as to anæsthesia. But there were occasions, especially associated with catalepsy, when hyperæsthesia existed. It is also to be noted that in one abnormal state she was very liable to toothache, but, when her state had changed, there was no memory or consciousness of the pain. During a normal spell, she was quite ignorant either of the pain or of having the tooth extracted under chloroform a few minutes previously. A year later, when in a similar state, she went through the same experiences.

11. Her general health varied in different states. In one state she would always be strong and well. In some other conditions her health would fail even to prostration, and apparently dangerous collapse and semicoma, yet she might, with a change of state, pass in the space of a few minutes, from this extreme collapse to a state of vigour and buoyancy.

12. As a means of classification, the Committee support the arrangement of calling the different abnormal states B 1 to B 10, whilst calling the normal state A. But the Committee, whilst recognising the sharp division between the personalities, are of opinion that there are relations between some of them. Thus B 2, B 3, and B 6 are somewhat on the same plane, though with many separate associations. B 2 is a very ignorant child, while B 3 is a strong, high-spirited, older child, and B 6 is a more advanced and better educated girl. B 6 learned a little French. No other personality ever knew French, not even the normal state. Again, the states might be grouped by the sensory function, B 4 as a deaf mute, B 9 as a blind imbecile. B 1, which exhibited mania, might perhaps be classed with B 10, which was of low type. B 5 and B 8 had only very recent memories, while B 7 was the opposite, her memory extending to before the age of three. Thus, though different, they worked somewhat on the same plane.

13. In no state were her habits in any sense or degree uncleanly.

14. Though there is no reason to regard these states as *petit mal* or post-epileptic confusion, yet it is important to record that she had three epileptiform seizures, in which she did not bite her tongue. These occurred on April 4th, 1896, May 5th, 1896, June 20th, 1896. The first menses appeared on December 4th, 1896. She was very ill in the first week in January, February, and March, 1896. These facts might separate the convulsions from the true epileptic state.

15. The maximum continuation of any one period was ten weeks. Others lasted as long as four to nine weeks. The minimum duration of any one state was two to three minutes. Once she changed three times in five minutes. She changed from one abnormal state to the normal, and from that to another abnormal condition. This intervening of a normal period between two different abnormal states occurred more than once.

16. The normal state, for the first eight or nine months, was intermittent and frequent. Sometimes it lasted six hours at a time, but usually from fifteen minutes to an hour or two. The normal condition gradually became less frequent and of shorter duration, so as to be reckoned by minutes, till, in the second year, days might pass without its occurrence. These days passed to weeks in the third year, till it finally disappeared. Her father was able at first to exert a power of suggestion in bringing her from the abnormal to the normal. But this failed after the third year.

17. There was no definite sequence of the states, though sometimes they followed the order of their primary development. B 2 very frequently came after B 1 and B 3 might follow B 2.

18. After these varying stages had lasted about three years, she settled down to one particular state, in which she has remained ever since, and the normal state does not appear to have returned. The Committee hold the opinion that she is now in an abnormal state. The reasons for this opinion are, that she seems more versatile and childish than an ordinary individual of twenty-one, and that all her associated memories are with that particular state, and her memory of French remains. Correspondingly, she has no knowledge or memory of the events of her life before the illness began at Easter, 1895, nor of the events of the other stages during her illness. Thus

she had to be introduced to her old schoolmates, and did not remember ever having been to school, or meeting them before. She has now been educated up to her surroundings, but not until 1900 would she respond to her correct name. Her intelligence is now good, and there seems no instability of mind or character. She is making her own living, occupying a position of trust. She is, however, liable to brain fatigue, requiring rest at intervals, or she loses her memory and becomes irritable and confused. She is still under observation, and, should any change occur, it will be reported to the Committee.

19. The Committee do not make any suggestion in the direction of explaining the occurrences recorded in this extraordinary case. We consider that the existing state of our knowledge in this region does not warrant such an attempt, and our efforts have been limited to verifying the facts and arranging them in an order which will, we trust, make them convenient for reference.

20. In conclusion your Committee recommend that the case, in the form in which it is now embodied, be published in full in the JOURNAL of the Association, together with facsimiles of selected specimens of the drawings and hand-writing executed in the various states, also the chart indicating the transitions and relative durations of the states.

CHAS. MERCIER, *Chairman*.

THEO. B. HYSLOP.

T. D. SAVILL.

T. OUTTERSON WOOD.

ALBERT WILSON, *Secretary*.

Sudden Permanent Amaurosis with Optic Atrophy and Epilepsy in a Case of Porencephalus with Hæmorrhagic Pachymeningitis. By T. K. MONRO, M.A., M.D., F.F.P.S.G., Physician to the Glasgow Royal Infirmary, and Professor of Medicine in St. Mungo's College; with Historical Report by JOHN W. FINDLAY, M.D., Assistant Physician to the Glasgow Royal Infirmary, and Assistant to the Professor of Medicine in St. Mungo's College.

Mrs. T—, a housewife, who died at the age of forty-four, lost the sight of both eyes when aged thirty-three. She was then tablemaid in a West

End house in Glasgow, and was going about the house at her ordinary duties, feeling as healthy as possible, when her sight left her, "in a moment," absolutely and for ever; everything was perfectly black to her afterwards. Before this occurrence she was healthy and vigorous, and had no knowledge of rheumatism, scarlet fever, or any such disease. She never had pain in the head or eyes in her life.

The menopause occurred about the same time as the loss of vision, and appears not to have been associated with any constitutional disturbance, or preceded by menstrual irregularities. She could not remember in later life whether or not she was menstruating when the blindness set in.

For some years before death she was liable to epileptic attacks. At one time she said that these had begun before she lost her eyesight, but she subsequently stated that they did not begin till she was aged about thirty-eight. In the earlier seizures she fell, but after a time the fits occurred only at night. She never had any warning, and she had reason to believe that there was little or no cry. She had no headache after the seizure, but she knew what had happened by the wetting of the bed, the biting of the tongue and cheek (chiefly on the right side), and a general sense of weakness on the ensuing day. She could suggest no cause for these attacks.

When the patient was seen in October, 1898, it was noted that the pupils were equal and somewhat large. Like the patient herself, they were quite insensitive even to strong light. There were no signs of iritis. A divergent strabismus was present.

Ophthalmoscopic examination showed that the iris, lens, and vitreous were normal in each eye. The fundus was deeply pigmented in accordance with the naturally dark colour of the iris and hair. The disc was pale and slightly bluish, and its margin was not well defined. There was considerable but not extreme narrowing of the vessels.

From February to April, 1899, the patient was under the care of Dr. Lindsay Steven in the Glasgow Royal Infirmary. In addition to the liability to fits, she had pain in the region of the descending colon, and undue frequency of micturition. The pain in the left lumbar and iliac regions was accompanied by tympanitic distension, and was considered (correctly, as the issue showed) to be of neurotic origin. No abnormality was discovered on examination of the pelvis. The action of the heart was somewhat irregular, but in other respects that organ was normal.

After leaving the infirmary, the patient remained at home for a while, but she was eventually removed to the Town's Hospital, where she died in February, 1903, from gradual exhaustion. I am indebted to the kindness of Dr. J. McC. Johnston, the senior medical officer, for the opportunity of being present at the autopsy, and of securing the brain for further investigation.

Post-mortem examination.—The cranium was normal. On the right side a very thin membrane was found lining the inner surface of the dura mater along the base, but especially in the middle fossa. This membrane was detachable, yellowish-red or rust-coloured, and associated with punctiform and other hæmorrhages. A great part of the right frontal lobe was replaced by what looked like a multilocular cyst with clear,

liquid contents. A patch of atheroma was recognisable at the bifurcation of the basilar artery, and a very slight patch could be detected further back in the same vessel; but no other abnormality of the arteries could be discovered to suggest any kind of arterial obstruction.

The heart was practically normal. Small patches of thickening were present at the commencement of the aorta, and the mitral curtains were slightly thickened; but the aortic valve was competent, the mitral orifice was of normal size, and, except in so far as has been mentioned, the organ generally was healthy.

The lungs were congested. An old induration was found at the left apex, but no definitely tuberculous lesion was discovered.

The spleen was somewhat enlarged, but was in other respects normal.

The kidneys were highly granular, with adherent capsules, and great atrophy of the cortex and to some extent of the pyramids. Their combined weight was $6\frac{1}{2}$ oz.

The large intestine was free from tumour.

The uterus was small, the ovaries were atrophic, the broad ligaments were thin.

A subsequent naked-eye examination of the brain disclosed no abnormality (in cranial nerves, bulb, pons, cerebellum, corpora quadrigemina, corpus callosum, cortex, internal capsule, or any other part) except atrophy of the optic nerve, optic tract and pulvinar on either side, and the porencephalus in the right frontal lobe.

Dr. Leslie Buchanan, surgeon to the Glasgow Eye Infirmary, was kind enough to examine one of the eyes, and he reports that he finds "very complete optic nerve atrophy in that eye; nothing else noteworthy; nothing to lead one to think of embolism or any such lesion. I do not think that the eye is primary."

The porencephalus, as viewed from the surface, did not extend so high as the longitudinal fissure, except for about half an inch at a distance of from one to one and a half inches behind the frontal pole. The lesion did not involve the ascending frontal convolution, but extended as far back as the præcentral sulcus in the middle part of the convexity of the damaged lobe. The whole breadth of the superior frontal convolution was preserved for more than an inch and a half from its posterior end; but the middle frontal was almost completely gone, only its upper posterior corner having escaped. The opercular part of the third frontal was almost intact, but the upper anterior part of the triangular portion had suffered. A narrow rim of the orbital portion extended along the convexity as far as the frontal pole, but there the lesion reached down to the fronto-marginal sulcus. The membranes which covered in the porencephalus were adherent to some parts of the rim of cortex, and at these parts the convolutions were atrophied. Attempts to detach the membranes under such circumstances caused tearing of the convolutions. When the membranes were cut through, it was found that the inner wall of the cavity was constituted by what looked like ordinary convolutions. The middle part of its floor was formed by a tough membrane, and when the latter was incised, access was gained to the lateral ventricle.

It is no easy matter to account for the sudden bilateral loss of vision. The symptom has been met in association with

giddiness and complete obscuration of the fundi under circumstances which pointed to hæmorrhage in both eyes as the cause.(1) It may also occur, apart from ophthalmoscopic changes, in uræmia, lead-poisoning, quinine-poisoning, anæmia from hæmorrhage, and convalescence from acute fevers, as well as after epileptic seizures.(2) It is possible that disease of the anterior corpora quadrigemina may give rise to complete blindness,(3) but disease of these bodies, when accompanied by blindness, almost always proves to be tumour with optic neuritis or hydrocephalus. Frederick Taylor, however, has recorded a case of disease, probably tumour, in this region, with blindness but without optic neuritis.(4) When the lesion is softening, the onset of blindness may be sudden, but this could scarcely be the only symptom.

In another group of cases bilateral amaurosis results from lesions of the visual centres or conducting paths in both hemispheres. As might be expected, these lesions may be successive rather than simultaneous. They may be situated in the two occipital lobes, and cause first hemianopia and then complete amaurosis. Gowers quotes from Sioli a case where sudden complete blindness, except perception of bright light in the outer angle of the left field, resulted from softening of the entire left occipital lobe and of the right angular gyrus and subjacent white matter.(5) Dr. Mary B. Hannay, pathologist to Gartloch Asylum, informs me of a recent case in the asylum where the patient suffered from sudden and complete loss of vision, and where evidence was found that both optic radiations had been damaged by hæmorrhage. There was also a cortical softening in the left inferior parietal lobule, but the cortex in both occipital lobes had escaped. Gowers mentions a case where cerebral hæmorrhage was associated with complete blindness, but where, after some days, vision was restored in the left lateral half-fields; he suggests that the hæmorrhage in the left occipital lobe caused temporary inhibition of the corresponding visual centre on the right side.(6) It is conceivable that atheroma or embolism may give rise to simultaneous symmetrical softenings. Clouston speaks of "vascular and trophic lesions of the brain, such as apoplexies, large or capillary softenings, and thrombosis" as being "exceedingly apt to occur in both hemispheres in the same places and almost at the same time."(7) This is certainly not the experience of a general

physician, although it is easy to understand that such symmetrical lesions may be more frequently met with in asylum than in ordinary hospital practice.

In 1896 I saw in Dr. Lindsay Steven's wards in the Royal Infirmary a girl aged 9 years who, some months after a blow on the top of the head, and after suffering at times during four weeks from frontal headache, vomiting, hunger, thirst, and pain in the cervical spine, and for two days from diplopia, was suddenly seized with complete blindness. She recognised a friend at 9.30 one morning and could see nothing at 11 o'clock that forenoon. There was no perception of light, and the pupils were large and quite irresponsive to light. Loss of the knee-jerks, polyuria, and constipation were other symptoms. The sense of smell was absent on both sides, but apart from this and the blindness there was no distinct paresis of cranial nerves; thus the pupils, though not contracting to light, contracted actively in convergence of the visual axes. There was for a time very slight bilateral optic neuritis, but this was not sufficient to obscure the disc-margins at all parts, or to account for either the degree or the suddenness of the visual impairment. The general nutrition was good, and the heart and lungs were healthy. The patient's mother had died of phthisis. Recovery took place except as regards vision. The optic atrophy ultimately became complete. The symptoms here pointed to a lesion in the posterior part of the cranial cavity, and it is possible that a tumour or meningitis near the tentorium cerebelli involved the mesial aspects of the two occipital lobes, either simultaneously or in succession; hemianopia from earlier involvement of one lobe might easily have escaped recognition by the patient and her friends.

Nevertheless, the various conditions which have been described do not explain the case which is the primary subject of this paper. In it the evidence before and after death pointed to bilateral optic neuritis, which passed on to atrophy, a lesion which does not account for amaurosis of sudden onset. The remaining changes found after death do not account for the amaurosis, and it is not easy to consider them responsible for the optic neuritis. Dr. Findlay, who has studied the histology of the case with great care, concludes that the porencephalus originated in a glioma which became the seat of hæmorrhage. If this is accepted as the correct explanation—and I admit that,

while it is not altogether satisfying, I can think of none better—several remarkable features of the case emerge:—(1) It is curious that a tumour of this size, giving rise as it did to optic neuritis, should have caused no other symptom, such as headache or paresis; (2) if hæmorrhage in this situation had anything to do with the sudden amaurosis, it is remarkable that it, too, caused no other symptom; (3) the case is interesting and encouraging as an example of the occasional arrest of a non-syphilitic intra-cranial tumour—an occurrence with which experience has already made me familiar in the case of the tubercular growth and the myxoma.

It would appear, then, that this patient, when aged thirty-three, suffered from optic neuritis in connection with an intra-cranial tumour which caused no symptoms. Some unknown factor—perhaps the occurrence of hæmorrhage in the growth—suddenly aggravated the neuritis, and caused an abrupt loss of sight. It may be that, without the knowledge of the patient, the one eye was already blind when the other was suddenly deprived of its remaining vision.

Porencephalus has varied associations. It is found in some cases of infantile hemiplegia, of cerebral birth palsy, and of idiocy, but may be met with under circumstances which during life never suggested the existence of a cerebral lesion. It may be congenital or acquired; an expression of defective development, or the last phase in a process characterised by destruction of brain tissue. It may be due to vascular disease (embolism, thrombosis, or hæmorrhage) occurring before or after birth, and is thus frequently found to correspond in a rough way with a particular vascular area, such as that of the middle cerebral artery. Traumata, local inflammation, and neuron-degeneration may also be recognised as possible causes. In the present instance, however, no cause could be discovered. Epileptic fits are common in connection with porencephalus, and in a case of that kind recorded by Barratt, and regarded as embolic, the inner surface of the dura mater on the side corresponding to the lesion, was lined by a thin blood-stained membrane (8), as in the case now under consideration. On account of the early age of onset, some of these cases of porencephalus lend themselves admirably to the study of the so-called “Gudden’s atrophy” in the human subject.

Histological Report, by John W. Findlay, M.D.

The external wall of the porencephalic cyst is composed of somewhat thickened pia-arachnoid, on the under surface of which is a thin layer of greatly hypertrophied glial tissue. The latter occurs in some places as a dense feltwork with few nuclei, while in other places it takes the form of a more open fibrillar network. Where the tissue is less dense, the nuclei are more numerous, and many branching cells with typical neuroglial characters are seen. In sections stained by Robertson's methyl-violet method, the nucleus of these cells is found to stain deeply, and to be round or oval in shape. One cell may contain two or even three nuclei. Though many cells show a fair amount of cytoplasm with branching processes, there are many others in which no cytoplasm can be seen, the nucleus simply appearing to lie in a fine meshwork of fibrils.

A section carried through the inner wall of the cyst to the mesial aspect of the brain shows that convolutions of grey matter are present on the mesial aspect only. This inner wall is composed of densely hypertrophied neuroglia identical in structure with that underlying the pia-arachnoid. At the anterior extremity of the cyst, the glial overgrowth has extended right through the white and grey matter to the pia-arachnoid, and here no nerve-cells can be recognised. As we pass backwards along the mesial wall of the cyst, we find the grey matter of the convolutions less and less involved, and we ultimately reach a place where all the layers of nerve-cells can be identified. The inner surface of the cyst is somewhat irregular, and a number of small subsidiary cysts or spaces can be recognised. Here and there throughout the glial tissue there are small foci which remain unstained or very faintly stained, and are thus evidently necrotic or degenerate. The hypertrophied glia extends right up to the endothelial lining of the lateral ventricle, but there is no communication between the cyst and the ventricle.

Examination of the larger vessels of the brain reveals no evidence of disease, except a few small opaque patches in the vessel walls, which are found on microscopic investigation to present the features of early atheroma. Throughout the gliomatous tissue, the glia seems to be specially dense around the blood-vessels. A small recent hæmorrhage is observed round a

large blood-vessel in the hypertrophied glia, immediately underneath the pia-arachnoid. There is perhaps a very slight thickening of the intima in some of the larger arteries of the pia-arachnoid and glial tissue. Granules and globules of hæmatoidin are found in great numbers throughout the pia-arachnoid and glial tissue. There is no round-celled infiltration.

The first, fourth, fifth, sixth, seventh, and eighth pairs of cranial nerves may be regarded as normal. Both third nerves are sclerosed and show very few healthy fibres.

The optic nerves are small, and an unusually wide space exists between each nerve and its sheath. The sheath is distinctly and the perineurium greatly thickened. The cells and interstitial tissue throughout the entire nerve are enormously increased. Staining by Weigert's method shows that normal nerve-fibres are altogether absent. The same increase of connective-tissue cells and fibres can be traced along the nerves through the chiasma into the optic tracts. As the optic tracts are traced upwards, a few normal nerve-fibres are observed here and there.

No normal bundle of nerve-fibres can be seen in the optic tracts or chiasma to represent the inferior (Gudden's) commissure.

In sections of the external geniculate body stained by Weigert's method, the pallor of the body itself and of the nerve-fibres entering it presents a marked contrast to the deep staining of the surrounding tissue. Very few well-stained nerve-fibres can be seen to enter this nucleus, and very few are observed between the cells.

In sections of the superior corpora quadrigemina, no nerve-fibres can be found in the stratum zonale, through which, under normal circumstances, the fibres derived, by way of the superior brachium, from the optic tract and retina course in a transverse direction. In the superior and inferior strata albocinerea the nerve-fibres are normal.

The following parts of the brain are examined microscopically, especially with regard to changes in the nerve-cells, and are found normal, namely: the cuneus on each side, the corpus callosum, the pulvinar on each side, and the internal geniculate bodies. The external geniculate bodies and superior corpora quadrigemina are normal, with the exception of the changes in

the nerve-fibres already described. The cells composing the nucleus of the third nerve have a normal appearance.

No difference can be detected between the two sides of the pons, or of the upper cervical cord. The left side of the medulla is somewhat smaller than the right, owing to a disproportion in size of the olivary body. No unilateral sclerosis or degeneration is made out.

It may be confidently asserted that the porencephalus owes its origin to a hæmorrhage, the occurrence of which is clearly indicated by the innumerable hæmatoidin granules in the pia-arachnoid and hypertrophied glia which constitute the outer wall of the cyst. It may be that the cortex and white matter were extensively destroyed by hæmorrhage, and that repair took place at the periphery by hyperplasia of the neuroglia, while the central part of the lesion developed into a cyst. Cerebral hæmorrhage, however, presupposes disease of the blood-vessels or of the heart, and any changes in the cerebral blood-vessels or in the heart of this case are so slight that they may be ignored. Another alternative which may be suggested is that we have to deal here, not with a gliosis secondary to hæmorrhage, but with a hæmorrhage secondary to gliomatosis; in other words that we have here a glioma which has been extensively destroyed by hæmorrhage. From the point of view of histology, we here come to a deadlock, for we have no sure means of discriminating between a hypertrophy of neuroglia and a tumour formation composed of neuroglia. One point which is rather opposed to the idea of tumour (though not conclusively), is that the new formation is nowhere very vascular; but this objection is more than counterbalanced by the absence of gross vascular changes which we should expect to meet with if the first view were the correct one. Moreover, hæmorrhages into gliomata are extremely common—a small recent one can be recognised in the hypertrophied glia in the present case—and may be so extensive that, as Gowers remarks, (9) the existence of the tumour may be readily overlooked.

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Some Remarks on Two Cases of Epileptiform Type, with some unusual characteristics. By F. E. RAINSFORD, M.D., Medical Superintendent of the Stewart Institution, Palmerston, Dublin.

I HAVE thought it desirable to bring before your notice to-day two cases which, in my opinion, present quite unusual clinical characteristics.

The first case is that of a lady, æt. 57 years, who was the subject of recurrent mania. She was admitted for the eleventh time within seven years on October 19th, 1899. The attack was of the usual excitable type—noisy, incoherent chattering, which, as a rule, convalesced within three months. Shortly after her admission her sister, with whom she kept house, died, and it was then decided that, looking to the constant recurrence of these attacks, her home should be made in our asylum. By November 23rd she was convalescing, but had another attack in the last week of the following January, another in June, another in August, and so on, at intervals of from three to four months, attacks of a similar nature.

On September 20th, 1901, I wrote that she has a well-developed attack of excitement, and that on the 23rd she is quieter, but looks weak and shaky. On the 24th inst., after a restless night, she took a fit—described by nurse as an epileptic one—just after breakfast, and when seen by me at morning visit was dull and looked much the worse for it. I sent her to bed and ordered her 3j whisky.

The next morning she seemed much better and went out walking. She had a good night, and on the following morning after breakfast took another fit (her second). Subsequently three slight ones, followed by one severe one, and then lesser ones up to thirteen by 11.45 a.m. She was ordered Pot. Brom. gr. 30, Chloral Hydr. gr. 20 *per rectum*, which was not retained, as the bowels acted. She had eighty-eight fits during the day. Her condition was by this time very grave; she lay in a moribund state. Her friends took, as they thought, a last farewell of her, and in this opinion I concurred. On each visit my first question to the matron was whether the patient was still alive.

As the fits showed no sign of lessening, I determined to try whether morphia administered hypodermically would be of any use, as I had often verified the good effects of such in uræmic and puerperal convulsions. Previous to doing so I examined the urine, but beyond that it

was turbid, scanty, and full of phosphates, I found nothing abnormal. I administered $\frac{1}{4}$ gr. Morph. Sulph. at 9 p.m. of the 27th, which had little effect, as she had seventy-nine fits during the night, though not of so severe a type. In the morning she was faintly conscious; the pulse was of a good quality. I again administered $\frac{1}{4}$ gr. morphia, and all during the day the fits continued in gradually diminishing force. She got $\frac{1}{4}$ gr. again in afternoon, and seemed to be improving slightly. One nutrient enema was retained, others were rejected.

The next morning fits had ceased, but patient was vomiting freely, was partially conscious, recognised me, and tried to speak, but speech was blurred. When vomiting ceased she began to take a little nourishment by the mouth and gradually improved, so that on October 1st she was up and looking wonderfully well. Her tongue had been very sore, but was now healed, and examination of the urine showed sp. gr. 1025; no albumen; abundance of phosphates. She had in all 282 fits.

This attack was followed by an acute maniacal state, which lasted for about six weeks, but she had no fits, and since then (three years ago) she has kept wonderfully well and able to go out alone, visit her friends in town, go and come unaccompanied, and, beyond a slight degree of dementia, has no traces of the serious attack she passed through.

When one bears in mind that this lady had been admitted on eleven occasions within seven years, and that on all these occasions no fits were ever known to occur, that she developed suddenly an epileptic state, had 282 fits, lay moribund for four days, and then completely recovered, and that there has been no recurrence within the last three years, I think you will agree with me that the case presents some unusual features.

CASE 2 is that of a boy æt. 13 $\frac{1}{2}$ years, who was sent to the imbecile department of our institution as having developed epilepsy. His friends did not know what to do with him.

He was one of a large family, the father of whom had been in a bank, and having drunk heavily was pensioned. He tried to keep his large family and himself in the position of gentlefolk on the wages of an artisan. They were reared on tea and bread and butter, and were all small, badly nourished, and anæmic.

This boy had been at the Blue Coat Hospital up to November, 1900. (He was admitted to the institution February 1st, 1901.) While in the playground of that institution one day he developed an epileptic fit. As further fits occurred he was removed from school and sent to the Whitworth Hospital under the skilled care of Dr. Travers Smith. While there his fits continued with great severity, and he puzzled the entire staff. In addition he proved a veritable "*enfant terrible*," worried everyone, cheeked the nurses, defied the Lady-Superintendent, and was generally so insubordinate that he had to be sent home uncured. At home he grew rather worse, and the fits went on. It was noted that they always occurred at night and always about the same hour, just after getting into bed, and that he always insisted that he should be strapped in bed for fear of falling out when in a fit and hurting himself.

It was also noted that he never hurt himself, and that he betrayed the greatest anxiety that the strap should be in readiness if required.

When the boy was brought to the institution his father gave me the above history. I confess that I was incredulous as to the character of the fits, the statement about the strap having a particularly strong effect on my mind, as it was new to me to see an epileptic taking any precautions to avoid being injured.

On inspection the boy proved to be a small, badly-grown, anæmic-looking individual, with an abnormally old face for his years. He was very self-centred and most anxious to tell me all about his symptoms.

On February 2nd (the day after his admission) he was reported to have had a very severe fit, and our head attendant, a man who had been with us for thirty years, said it was about as bad a fit as he had ever seen.

On the evening of February 4th, just at bedtime, it was reported to me that he was in a fit; I found him in bed with his belly-band round him, just getting over a fit. I was at once struck by the excellence of his colour and the rapid recovery he had made, so I abused him in no measured language, and said that if he got another fit he should have a bucket of cold water thrown over him, and another if another occurred, and so forth. I sent for our night nurse and told her to get me three fire buckets full of water, to place them beside his bed, so that he might see what was in store for him if another fit occurred. Shortly after I left him he got another violent fit, and while in it got out of bed and lay on the floor. The night nurse being summoned, took up the bucket of water, and said if he did not get into bed at once over him it would go. He recovered at once, got into bed, and slept the remainder of the night.

This was on February 4th, 1901; from that date to the present he has never had a fit, and he is now in an office doing well.

DISCUSSION

At the Meeting of the Irish Division, April 27th, 1904.

Dr. DRAPES said he did not think the second case was one of malingering; more likely it was a neurotic condition. He thought that in a very few and carefully selected cases the cold water treatment did an immense amount of good.

Dr. WOODS related a case which had been under his treatment for a long time, and which had been trephined without any good result. The patient, who was a criminal, developed fits which he always believed were feigned, and when treated with firmness she gave a great deal less trouble. Finally she was sent to Dundrum for an aggravated assault on another patient, where she was considered the most troublesome patient ever admitted, but under determined treatment she had become fairly useful and quiet, and the fits had disappeared.

Dr. CONOLLY NORMAN thought the treatment of uræmia and pseudo-epilepsy with morphia injections rather dangerous. He considered the effect of the threatened water douche in the second case to have been a hypnotic one, and he also considered that the presence of the belly-band brought on the fits owing to another hypnotic suggestion.

Dr. FITZGERALD related a case in which a patient developed epileptic fits, but a real epileptic attacked him in one of them, and he never had another.

Dr. RAINSFORD, in replying, said he considered the effect of the cold water threat to have been a hypnotic one. The case was probably one of pure hysteria. As regards the treatment by morphia, he said he had seen it used with good results by Dr. Lennon, of the Meath Hospital, in uræmia. There was no aura, nor did the patient bite his tongue.

A Case of "Dementia Præcox." By HENRY M. EUSTACE,
M.D.

MR. X. Y. Z—, admitted to Hampstead, Glasnevin, co. Dublin, on September 25th, 1903, a boy, æt. nearly 21; single, middle-sized, well-built, with handsome blue eyes and intelligent features. Weight, 9 st. 7 lbs. Temperature 100° F. Condition of body on admission: Suppurating burn in left axilla; bruise on right thigh; right eye blackened; slight hæmatoma on right ear; heart-sounds normal and pulse good; respiration slightly irregular, but no dyspnœa; tongue dirty and tremulous, but no fibrillary tremors; lips covered with sordes; appetite very precarious; bowels constipated; eyes: pupils equal, slightly contracted, no irregularity, reaction very active for light but normal for accommodation; reflexes: patellar exaggerated, cremasteric exaggerated; muscular tone fairly good; sensation normal; urine normal.

Family history.—Patient's father was very eccentric and starved his sons. An aunt of patient's was melancholic.

Previous history.—Patient was always a very excitable boy, idle and bumptious. He was sent to an English public school, but was "withdrawn" therefrom. Afterwards he had an English tutor, who was also a student of medicine. The tutor states that patient's mental capacity was very poor, but that the patient was very clever in the pursuit of game, and an excellent shot. Patient states that he has masturbated since he was 10 years old. At the age of 20 patient was very eccentric, unstable, and with an exaggerated sexual appetite. Six weeks before admission the patient became very restless, and with his tutor started for the North-West territory in America. There he became acutely maniacal, and he was ordered home by medical advice. He was put in charge of his tutor and a trained attendant, but he was very violent on board ship.

Notes on Progress of Case (Extracts).

September 25th, 1903.—On admission, patient in a state of acute mania. Temperature 100° F. (Night previous temperature was 104° F.) Pulse 96. Ordered a hot bath, slop diet, and bed treatment.

September 27th.—Patient progressing favourably. Has obtained six hours' natural sleep each night since admission. Delusions are of a semi-

religious type. States that he is "Deus," and that those in attendance on him are "devils with tails" or "angels." Temperature is now normal. Abscess healed under antiseptic treatment

October 13th.—Patient expressed a fleeting delusion that he was Napoleon, but the delusion that he is "Deus" has gained in intensity, with the result that he considered he could live "on bread and water only" for two days and nothing on the third day. He again became acutely maniacal, and it was necessary to feed him artificially, which process he resisted more violently than any other case I have met. Patient also stated that he had no "apertures" and would not defæcate or micturate. In order to convince him to the contrary, and to give him relief, an enema was administered and a catheter passed.

October 14th.—Patient stuporose for first time this morning with very profuse salivation and cyanosis of the extremities. Easily fed with the nasal tube.

October 20th.—Since last note patient has varied from day to day, although the delusion that he is "Deus" persists. He eats ravenously while maniacal and delusional, but partakes of almost nothing while stuporose on the following day. He has also "clean" days and "dirty" days. Verbigeration noted for the first time, as patient repeated excitedly for hours "Work without ceasing, work without ceasing," while he rubbed a pane of glass with his handkerchief or polished the buttons on the attendants' coats. Patient sleeps fairly well, but occasionally is reported as having been "noisy and excited" at night. Patient masturbates sometimes "*coram publico*" unless checked, but apart from this there is nothing repulsive about the boy, who still retains a singularly attractive manner on his "good" days.

November 10th.—Patient has been more frequently stuporose or "in a sort of trance," as one of the attendants described the condition. Often gazes for hours fixedly at the bright sun. States that he can be "Deus" or "X. Y. Z—" alternately, and his conduct is in accordance with this statement. Violent occasionally, *e. g.*, when stuporose and lying on a sofa he suddenly performed the gymnastic feat of kicking one of the attendants severely in the face, the attendant at the time bending over patient's head in order to settle patient's collar. Has been taking Allen and Hanbury's Byno-cascara for a month, and continues to gain in weight. Now scales 11 stone.

January 1st, 1904.—Patient continued to alternate during the winter in much the same way as I have described in the autumn notes. The only fresh symptoms during the winter were catalepsy and "jargon aphasia," as shown in his literary production, entitled: "To Josephine, the son of Joseph, the enid of Cupid, the wife of the Church, the Queen of Italy, the treasure of Cæsar, the wife of Napoleon, the persecuted Napoleon, the laughing water, the sweet Minehaha, the great Hiawatha, the great white Chieftain, the leader of the Zulus, the leader of the Incas, has come to claim his daughter, the daughter of the Prophet, the daughter of the Wind, the daughter of the Water, the daughter of the Grave, across the deep-sea water."

February 1st, 1904.—Patient fat and strong, but more frequently "dirty" at night. Visited in consultation by Dr. J. Magee Finny, who knew patient in his boyhood. Dr. Finny approved of the suggested

trial of extract of thyroid gland at this stage of patient's illness. Patient was placed on this treatment from February 10th in doses gradually increasing from 5 grains to 60 grains towards the end of the third week. There was a definite reaction physically to the drug, as patient's temperature frequently rose above 99° F., and he lost more than a stone in weight during the three weeks, being reduced from 11 st. to 9 st. 13 lb. His pulse increased very much in frequency, rising to 120 during the last week, and it was therefore considered advisable to put him to bed during that week, and not to push the drug beyond 60gr. doses. Mentally the patient remained facile while in bed, but on

March 1st, 1904, a marked relapse occurred. Patient became extremely excited; stated that he "wished for a job either in the Church or the Army, and I don't mind whether I fight for the Russians or the Japanese."

March 30th.—Patient's stuporose attacks became more frequent, and also during the past month he was more often cataleptic. The strained attitudes he maintains himself in for hours at a time are wonderful, *e. g.*, "I am a blind man," with head thrown back so far that ears were deeply cyanosed. "Flexibilitas cerea" has also been demonstrated, patient allowing his rigid arm to be extended horizontally, and maintains it in this position.

April 6th.—Verbigeration has been more marked recently and associated with katatonic excitement, *e. g.*, patient frothing at the mouth chanted in a low but excited voice, "I, X. Y. Z—, murdered Th., the younger brother of M. T—, and you have no right to prevent me, a murderer, from giving myself up to the police." With widely dilated pupils he kept on repeating this all night on the 2nd inst., at the same time dancing up and down with katatonic movements till the sweat poured off him. Morphia, $\frac{1}{4}$ gr. hypodermically, with a hot bath and cold water applied to his head did not diminish his excitement till 6 a.m.

April 20th.—Patient's memory remains good, and psychic comprehension so good that he can relate everything that has gone on about him. His mannerisms are most peculiar, and his acts lately are based on chance fancies. His affective emotions are perverted, *e. g.*, embraces other male patients, but his love for his mother remains constant, and he frequently asks for her.

[I am indebted to my brother, Dr. W. N. Eustace, for some of these notes.]

"Dementia præcox" (according to Kræpelin) is characterised by a definite kind of mental enfeeblement that is not found in any other psychic disease. This mental enfeeblement takes the form of an alteration of the emotions, and the association of ideas with little or no morbid impairment of the memory, of consciousness, or of the power of orientation. There is no line of demarcation between the different varieties (hebephrenic, etc.), and they are rapidly interchangeable. The disease as a whole is well differentiated from other psychoses, though it is not always easy to distinguish it from paranoia.

However, such a case as this of X. Y. Z—presenting such a chain of symptoms, *viz.*, disturbances of association and of emotions with (*N.B.*) specially marked katatonic movements alternating with stupor, much excitement, often culminating in violence, cataleptic immobility, “*flexibilitas cerea*” or rigidity of muscles, feeble judgment, “jargon aphasia” or confusion of written or spoken language, “verbigeration” or constant repetition of nonsense—with memory, psychic comprehension, and perceptive faculty remaining excellent—gives us a distinct picture of this disease.

Blenler believes that the symptomatology of dementia *præcox* is sufficiently definite to enable one to make as unerring a diagnosis of it as one does of pneumonia or typhoid fever.

It is very interesting to note that Wilmanns, out of 120 tramps who reached his asylum from the workhouse, placed no less than 66 under the head of dementia *præcox*.

Dr. James Shaw⁽¹⁾ (to whom I am extremely indebted for his article on dementia *præcox*) does not believe that this large proportion of hebephrenic and katatonic cases which Wilmanns has found among tramps can be solely accounted for by their mode of life, or by the influence of imprisonment, but rather that the congenital mental condition in such cases directly predisposes to an anti-social and unsettled life.

Ætiology of dementia præcox.—Adolescence is the great factor. Kræpelin found that out of 296 cases 60 *per cent.* began before the age of twenty-five. Heredity is important. Morel considers that alcoholism in the parents is a powerful factor.

Prognosis.—The duration may be of 10, 20, 30, or even 40 years. Remissions may be observed in the second stage, and especially with katatonic excitement. In 20 *per cent.* of the cases the remission is prolonged, and the patient almost recovers. Relapses generally supervene within five years of the onset of the remission. While the disease is not fatal like general paralysis its prognosis is very grave, and mental recovery is rare.

Treatment.—We have found in this case that systematic outdoor exercise, such as cross-cutting timber, or rolling a lawn, combined with a fattening diet, lessens the patient's excitement and keeps him physically fit. The bromide and bark mixture is valuable when indicated. Sérieux states that organo-therapy

has given no good results. Re-education of "suitable" cases has been proposed, but cases of dementia præcox have little regard for discipline, and cannot fix their attention, and, therefore, the re-education of any of them seems hardly practicable though the perfection of counsel.

(1) *Medical Annual*, 1904.

DISCUSSION

At the Meeting of the Irish Division, April 27th, 1904.

Dr. LEEPER said that the condition produced by the disease was a terrible one, and he did not believe recovery was possible. The tendency was always downwards. It was an original paranoia, and arose from congenital causes; the brain seemed to work all right up to a certain point and then symptoms came on. He had tried the thyroid treatment in these cases and had found it unsatisfactory. He had had a case of a boy with all the symptoms of this condition, which, after a course of thyroid treatment, showed absolute recovery for three or four days, and then relapsed into a profound condition of restless mental excitement which he never emerged from. He asked if Dr. Eustace had noticed the pupils dilated in the morning and contracted later on in the day. This had been described as symptomatic, and there was also nearly always marked deformity of the palate. He believed Dr. Lewis Bruce had isolated a bacillus for the disease, but his own belief was that it was a congenital mental defect, and that it would never be found curable.

Dr. CONOLLY NORMAN said he did not like to admit that dementia præcox was so enormously frequent. Krapelin says that these cases are very unfavourable in general prognosis. If the condition was one of really congenital mental deficiency, nothing could be done, but he did not wish to believe that we could do nothing. Again, it was the fashion to describe any form of mental disease, occurring at any period of life, when the patient might have broken down at puberty, as having been a case of dementia præcox. He referred to a publication which described cases of hypochondriacal paranoia occurring in middle life as a sequel to dementia præcox, that is, a person gets an attack of insanity at adolescence, gets well, and goes about for twenty or thirty years and then becomes insane, and these cases were set down as dementia præcox. This would lead one to set down any patient who had had an attack in early life as incurable, and this was contrary to his experience. Those cases with katatonic symptoms, periods of excitement varying with stupor, were unfavourable. Skae long ago pointed out that there was a form of insanity which he called the hereditary insanity of adolescence, which was of very unfavourable prognostic import. Some have given the katatonic form a definite toxic cause, but there are difficulties against this, one of which is the difficulty of saying what constitutes a case of katatonia. Why the condition was called dementia præcox he failed to see, because dementia was not very characteristic of the disease. While admitting the gravity of the prognosis, he, generally speaking, would distinguish between cases of insanity at adolescence which would recover and those which would not, the latter being those in which there was no very marked maniacal excitement or melancholic depression, or else in which there was well marked cyclical alternation, but on the whole he believed that the diseases of insanity of adolescence were not so incurable as it is the fashion to believe.

Dr. DRAPES deprecated the over-classification of mental diseases, and considered that classifications should tend towards simplicity of terms, and he thought that giving a case a certain name ranked it as incurable. He believed that dementia præcox was only a question of degree, and that some cases were curable, some doubtful, and some incurable. He had met with cases, apparently hopeless, which had recovered, and he would merely call all these cases adolescent insanity.

There were a great many cases of insanity occurring at different times of life which should not be labelled with any particular names.

Dr. EUSTACE said he had noticed the patient's pupils dilated at one time and not at another, and that he believed this to be due to him being excited in the morning, and then staring fixedly at any object for long periods. The patient's palate was well shaped. He agreed that the nomenclature was unfortunate. He believed that these cases of dementia præcox differed in a marked degree from cases suffering from adolescent mania which had drifted into dementia.

Occasional Notes.

The International Home Relief Congress.

The fourth International Home Relief Congress, held in Edinburgh June 7th to 10th, accomplished a vast amount of excellent work, attracting a great deal of public attention and receiving a most satisfactory measure of support.

The title of the assembly, which is perhaps a little vague, is intended to comprehend all those questions which can be grouped under the term of "Assistance familiale"; all the questions, in fact, which relate to the supplementing or superseding by home-like agencies, and the influences of home life, the assistance given to social weaklings in the prison-, convent-, or barrack-like "institutions" of the past. The treatment of insanity formed, therefore, a small portion of the business, and in this the meeting differed from that held at Antwerp in 1902, the purpose of which was the consideration of the family care of the insane.

The President of the Congress, Lord Balfour of Burleigh, opened the proceedings by delivering an inaugural address in which he touched upon the general scope and aim of the conference. It was obvious that this distinguished politician was proud of the position of his country with reference to all questions connected with family care, but with gracefully assumed modesty he said "few could suggest that she had nothing to learn from the other great nations of Europe and America." Perhaps the most striking concrete fact mentioned by Lord Balfour was in connection with the care of orphans and children deserted and separated from their parents. Of all

these classes taken together there are 7110 chargeable on the rates, of whom no fewer than 6195 are in family care, or 87 *per cent.* of the whole number. The mere statement of this fact is a stinging rebuke to the apathy of the public in other parts of the United Kingdom who are contented to let this pitiable class fester amidst the infamous associations of the workhouse till they are old enough to be enrolled in the great army of artificial degenerates of which the English Poor Law has ever been the fostering mother.

In the Insane and Epileptic Section valuable papers were read by Dr. Alexander Robertson, Dr. Charles MacPherson, and Dr. J. F. Sutherland on "The Scottish Boarding-out System," which produced an interesting discussion.

Dr. van Deventer, of Amsterdam, from experience at the Meerenberg Asylum, advocated family care from the asylum as a centre. Dr. Norman, of Dublin, advocated the same method on *a priori* grounds. One of the most remarkable features of the discussion was the hint which seemed to fall from the President of the Section (the Master of Polwarth) and from Mr. Spence, Secretary to the Scotch Lunacy Commission, that the Scotch system of boarding-out is a good deal too decentralised, and that too much is left to local Bumbles—we say "seemed to fall," for both gentlemen hastened to explain that they had not meant what their hearers thought. We gladly accept their explanation. Nobody except Lord Dunsdonald can afford to substitute *diaboli* for *dei* as the last word of the creed about the popular voice. So the parish council must remain the *deus* in this case. Dr. Carlyle Johnstone contributed a description of "The After-Care of Friendless Patients Discharged from Asylums as Provided for by the Scottish Probationary Procedure."

The Rev. Mr. Hawkins gave a description of "The English After-Care Association," and Dr. van Deventer described the details relating to "After-Care in the Netherlands."

Epileptic colonies received a very considerable amount of attention, papers being read by Dr. F. Beach on "The Chalfont Colony," and by Dr. Donald Fraser on "Bielefeld and the Proposed Colony at Bridge of Weir." The care of mentally defective children was also very fully discussed.

The meetings were fully reported in the Scottish daily papers, and thus there was secured, in addition to the scientific

advancement of the subjects, a very considerable amount of popular enlightenment.

A word must be said on behalf of the strangers for the reception afforded to them by "Auld Reekie." The *Lancet* justly remarks that "the citizens of Edinburgh vied with each other in showering splendid hospitality, both public and private, on the members of the Congress." Outside these princely proceedings, calculated to astonish the most seasoned congressman, every stranger had to be thankful for the sincere and cordial kindness of the Ladies Committee, who laboured with unceasing geniality to uphold the name of the Assembly and make Edinburgh truly a home for all their visitors.

Lunacy Legislation.

The discussion raised in the House of Commons by Sir John Batty Tuke is worthy of the most earnest attention of the Medico-Psychological Association. He and the various speakers who followed him demonstrated to the hilt the necessity that exists for an increase in the *personnel* of the Lunacy Commission and for improvements in the lunacy law.

That such legislation is needed is proved by the fact that the Lord Chancellor introduced lunacy bills for several years in succession which passed the House of Lords, but always succumbed to the "want of time," "pressure of business," etc., which are the stock-in-trade excuses of the House of Commons for neglecting the affairs of the nation, whilst wasting half its time in party prabbles.

The course of lunacy legislation in the last thirty years is, probably, as good an example as could be found, not only of the waste of time, but of the waste of effort, in our Parliamentary procedure. The Lunacy Act of 1891 was the outcome of fourteen years of Parliamentary work, beginning with a Select Committee in 1877.

Year after year bills were introduced, passed through Committee, and dropped for want of time. Most of the discussions on the clauses were doubtless wanting in reality and earnestness from the knowledge that there was no prospect of the bills becoming law. Thus year after year the time of Parliament

was wasted in reintroducing the new bills and going through the prescribed procedure. It may be argued that the ultimate production was a great improvement on the bill of panic and prejudice that was first introduced, and this no doubt is true ; but most of the improvements were introduced in the first three years, and probably most of the other amendments would have been equally early adopted if there had been the feeling that the bill was likely to become an Act instead of being a "hardy annual."

Lunacy legislation would, therefore, suggest that much Parliamentary time and effort would be saved if bills that had passed either House in three successive years should have precedence of all others in their fourth year. If such a rule had been in force the present Lord Chancellor's bill might have become law last year.

Habitual logorrhœa, from which so many Members of the House of Commons suffer, is, however, an even greater hindrance to legislation than defective procedure, and it is interesting to speculate how much longer the country will continue to elect representatives suffering from this troublesome psycho-neurosis.

The Lunacy Bill.

The Lunacy Bill, introduced by the Attorney-General on the 18th of May, is practically an extract, from the Lord Chancellor's previous bills, of the clauses relating to the treatment of incipient and unconfirmed insanity. These clauses are almost identical with the recommendations made to the Lord Chancellor by a conjoint committee of the Medico-Psychological and British Medical Associations.

The advisability of this mode of procedure has been criticised by Professor Clifford Allbutt in a letter to the *British Medical Journal*. Professor Allbutt's main difficulty is in regard to what constitutes borderland cases, and asks for a definition.

Definitions of insanity, however, are not in fashion, and it is doubtful whether anyone will be rash enough to oblige him.

Incipient and unconfirmed insanity is, however, sufficiently plentiful. Half of the cases admitted to asylums have shown mental symptoms for over three months, and during that period

must have been regarded by their medical attendants as incipient, unconfirmed, or borderland cases. The difficulty of recognising such cases did not seem to weigh on the large number of medical men of considerable experience who waited on the Lord Chancellor some years back. Nor did it seem impossible to the framers of the Scotch law.

Professor Allbutt very properly insists on the great advantages of hospital and asylum treatment, and this can be fully endorsed without admitting that there is no other possible form of treatment between that and the home.

The experience and testimony of many physicians engaged in the practical treatment of insanity is that incipient mental disorder may often be treated to cure at home, in the out-patient department of hospitals, and in single care. In Scotland, moreover, 20 *per cent.* of the insane are treated in homes, and apparently with great advantage.

Professor Allbutt's statement of his experience of the care, or want of care, of single certified cases, is a very cogent argument in favour of the views that have been so often and so strenuously advocated in this JOURNAL, *viz.*, that only persons specially qualified and having homes specially adapted should be permitted to take charge of single cases either of certified or incipient insanity. One of the strongest arguments in favour of these clauses is the fact that the Lunacy Commissioners will have an opportunity of inquiring into the character of the persons and the conditions of treatment of the incipient cases.

The clauses substitute an open, straightforward means of treating such cases, without subterfuge, evasion, or breaking of the law. Under the present unreasonable law, on the other hand, there is always a ready excuse for breaking through statutory requirements, and everybody knows that this is done every day. This will check the habit of treating patients as incipient cases again and again, and will prevent such treatment being carried on for an indefinite period.

Professor Allbutt's criticism of "single" care appears to involve a condemnation of the Scotch system, and, as applied to England, will not be accepted as absolutely just. Many alienist physicians who have supervised the treatment of single cases, seeing them more often than once in a year or two, will bear testimony to the fact that there are many who are treated

perfectly satisfactorily, whilst admitting that in other instances the criticism is just.

The Bill will add considerably to the work that the Lunacy Commission might undertake if it had a sufficient *personnel*, and will certainly entail unavoidable work, which will be a grievous addition to the existing overburden. This should offer an opportunity for the members of Parliament interested in the subject to introduce a clause strengthening the working power of the Commission by the appointment of a few more medical commissioners.

The Library.

The library of the Medico-Psychological Association would appear to be now advancing to a stage in which it will become one of the most useful adjuncts of that body.

The library was founded, as most of our members are aware, on the legacy of the books bearing on psychological medicine belonging to the late Dr. Hack Tuke, to which have been added a residuum of the library of the late Dr. Lockhart Robertson. Various smaller gifts of books from authors and others, with a few purchases, have brought the total of works to upwards of a thousand.

The income derived from the Hack Tuke Memorial Fund is also devoted to the library, and for several years past this has been expended in rebinding, cataloguing, etc. Catalogues, both of authors and subjects, have been completed, and the Library Committee have recommended that the original idea of making the library accessible by circulation to the most remote member of the Association in Great Britain and Ireland should now be carried into effect.

To enable this to be satisfactorily done, it has been further proposed that a subscription be made to Lewis's, so that current works not yet added to the permanent library may be accessible to members.

The importance of giving members of the Association who are remote from reference libraries the power of obtaining by post the books they need for any special work is too obvious, and has been too often advanced to need any additional urging.

The supplying of this long-felt need will go far to advance the scientific work of the Association.

In many libraries, a bibliography of subjects is being gradually accumulated, and one branch of the library work should certainly consist in this. If the medical officers of each asylum would undertake to compile a complete bibliography of a certain number of subjects, the value of the library would be greatly increased, and the work of the library committee in future acquisitions greatly facilitated.

The extension of the library should now attract the fullest attention of the Association. Efforts should especially be made to obtain gifts and bequests of works, and the appeal of the committee for liberal grants of money to purchase new books should be met in an intelligent and liberal spirit.

The editors are endeavouring to arrange that many of the most important exchange journals shall find their way to the library, and probably the appeal of the library committee will result in the arrival at the same destination of many of the books submitted for review.

The Latest Prophet.

Dr. Dowie, a contemporary informs us, now prefers claims to be a veritable prophet, bearing an Old Testament name, but unlike other prophets he does not seem to meet with much honour even out of his own country. The modern publicans, as represented by hotel managers, have cast him out, and from the ordinary street sinners he has to be protected by "Zion Guards."

Dr. Dowie appears to be strongly convinced that the prophet business cannot be carried on without money, and has estimated in millions of dollars the shekels received by the apostles. This suggests an interesting calculation, *viz.*: If twelve apostles get so many million dollars, how many should an Old Testament prophet get? Dr. Dowie would probably answer "As much as he can."

These prophet phenomena are certainly very astonishing in this twentieth century, and the ordinary man asks how much longer can humanity be deluded by such anachronistic absurdities. It is to be feared that they connote a very grievous

defect in the mental and moral development of a very large element of our civilized communities, and, however ludicrous the spectacle may be, they demonstrate the need of much educational effort before their recurrence, in one form or other, becomes an impossibility.

Laboratory for the Study of Abnormal Classes.

The effort to establish a laboratory for the study of abnormal classes at Washington has failed, owing to the opposition of the Commissioner of Education.

The proposition was in reality only an extension of work that has been carried on for the last ten years in the Bureau of Education at Washington, resulting in six publications on crime and related subjects of very considerable interest and importance. It would certainly appear to be a matter for regret that the work should not have been extended, especially as the proposition has received very important scientific support throughout the States.

With the usual personal directness which is characteristic of the discussion of such matters in the States, it is urged by the supporters of the laboratory scheme that the present Commissioner of Education has had practically no scientific training, being devoted solely to metaphysics and education; if this is really the case, there need be little astonishment at his exercise of authority, but considerable surprise may be felt that the decision of so important a question should rest so absolutely on the dictum of one man. This is surely another example of autocratic democracy.

The Youghal Auxiliary Asylum.

The progress of the Youghal Asylum is so instructive that we regret we cannot present our readers with a continuous history of its development. Things are recorded, perhaps, in the local newspapers, but it is only now and again, when they attract attention in the outer world, that we have an opportunity of watching from afar a singular piece of annexation as clever

and as complete as anything that England has done in Egypt or France in Cochin-China.

As our readers will remember, this institution was founded as an auxiliary to the Cork District Asylum. It was to be managed on lines too economical to admit of trained nurses or a resident medical officer. Women whose sole qualifications were physical strength and absence of refinement, together with a male person of the same type to act as manager, were suggested as good enough for the purpose of ruling the occupants. The scheme, having proved acceptable through its cheapness (physical force being a drug in the market), was modified so far that a number of nuns and a chaplain were placed in residence, while a visiting physician was appointed. This singular change of front was not accompanied by any change of title. The institution, which would appear now to contain about 400 patients, is still the Youghal Auxiliary Asylum. Judging from the reports of the meeting of the Cork Asylum Committee held on June 14th, the new asylum is quite independent of the old, and, indeed, is unique in its management among the institutions for the insane supported by public money in the United Kingdom. On the date mentioned Dr. Woods, Superintendent of the Cork Asylum, would appear to have been asked some question about a man who had been newly appointed assistant fireman to the Youghal Auxiliary, and to have answered that he himself would induct this man into his duties. Somebody suggested that this seemed reasonable, as the nuns could not perform this particular duty, but after a discussion in which the usual taunts were levelled at the medical superintendent, that officer seems to have been authoritatively informed that "the nuns who are in the institution at Youghal would have complete control over it, with a sub-committee meeting there." Dr. Woods is reported to have said that he felt it necessary to go to Youghal until the rules for the government of the asylum there are in existence. When the rules (made, we suppose, by the committee under the Local Government Act, and evidently in such a manner as to transfer all administrative authority from the medical superintendent to the nuns) were approved by the Lord Lieutenant he need not go, but until he was freed from responsibility he should go there. He was informed during the course of the debate that his duties began and ended with seeing that no patient should go to the asylum at Youghal

except he was a fit and proper subject. We would strongly suggest that the Lord Lieutenant in sanctioning the new rules should remove even this obligation from Dr. Woods' shoulders. To be required to send cases that are suitable for special treatment to an institution to which he shall not have the *entrée* is to be exposed to risk if anything should go wrong, and we fear that this risk is very considerable in spite of Dr. Woods' record—a lifetime given to the devoted study of his business. On the other hand, we cannot wholly approve of the wisdom of the course the Cork Committee is taking. Fire is a dangerous element, more incalculable even than "lunatics," and it might be wise for those who know very little about it to share their responsibilities with those who are familiar with the provision necessary against its vagaries. Meanwhile, the transfer of power from medical to lay or from lay to clerical hands (it can be put either way according as our reader interprets the word "lay") is almost complete.

Cruelty in the Ballinasloe Asylum.

It would appear that at the March meeting of the Ballinasloe Asylum Committee it was reported that an attendant had struck a patient while the latter was confined in a straight waistcoat, and had broken the patient's nose. The acting medical superintendent had suspended the attendant. The Committee, incredible as it may appear, seem to have confined their action in this matter to administering a reprimand to the ferocious and cowardly servant who had been guilty of this crime. That they were thereby condoning as odious a piece of cruelty as ever was committed does not even seem to have occurred to them. When it was reported that the magistrates in Petty Sessions Court had fined the attendant £5 the following conversation occurred at the Committee meeting (*Western News*, April 16th).

Mr. Carr.—If he is kept here after that it will be a disgrace to the institution.

Mr. Millar.—Is he not sufficiently punished?

Father Begley.—Have we the power to punish?

Dr. Mills.—Yes, we can fine or dismiss an attendant.

Father Begley.—This case was brought before us, and we

were led to believe it was in self-defence, and he was let off with a caution.

Dr. Mills.—You have absolute power in the matter to fine or dismiss for cause shown. The evidence of M'Donnell contradicts the theory of self-defence.

Father Begley.—How could he contradict that when he was not there? This poor fellow was left alone with fifty refractory patients, the worst in the house, and no wonder he lost his head. It does not follow that he might not have kicked him to death as he was kicking the patient, whom Mannion went to save. Who brought the prosecution?

Mr. Byrne.—It was brought by the Attorney-General and Solicitor-General. It was stated somewhat differently in the court to what was stated here. I did not understand that the patient was in a straight jacket, and it was stated that there were only thirty patients there instead of fifty.

Father Begley.—It's putting a premium on lying when there was no evidence against him but himself.

Chairman.—Will you go back on your action of the last day?

Father Begley.—Are we to be over-ruled by parties, or are we to enact a farce by punishing a man and then being over-ruled?

Dr. Mills.—I rather pressed the Committee to dismiss him.

Mr. Lohan.—I look upon the act of the Castle as throwing a slur on us. We should draft a resolution protesting against their interference.

Father Begley.—It is a terrible snub on us, who spend our time here, to be over-ruled.

The matter was allowed to drop.

However, the matter did not drop, for we find the following question in Parliament recorded in a later issue of the journal above quoted.

Mr. Sloan asked the Chief Secretary for Ireland whether he was aware that an attendant named Kenny, of the Ballinasloe Lunatic Asylum, inflicted injuries upon an inmate under his charge, and if, in view of the fact that the acting medical superintendent dismissed Kenny, who has since been fined by a magistrate in £5, he could say for what reason have the Asylum Committee reinstated Kenny.

Mr. Wyndham.—The facts are as stated. Kenny was ordered to pay a fine of £5, or in default to undergo two months'

imprisonment with hard labour. The appointment and dismissal of attendants are vested in the Committee without power of intervention on the part of the Executive. The Committee, I understand, consider that the fine of £5, together with a caution which it administered to Kenny, was sufficient punishment. Should the Committee insist on retaining the service of Kenny, the Government will consider how far the action is consistent with the conditions upon which the capitation grant in aid of the maintenance of the insane is payable under section 58 (2) of the Local Government Act, 1898.

This section provides that the capitation grant be payable to such County Councils as shall "satisfy the Lord Lieutenant that they have fulfilled their duty with respect to accommodation and buildings for lunatic poor, and that their asylum is well managed and in good order and condition, and the lunatics therein properly maintained and cared for." The Inspectors of Lunatics seem also to have addressed a letter to the Committee remonstrating with them for retaining this attendant in their service.

At the Committee meeting on May 9th it was reported that Kenny had resigned his appointment. A lay member of the Committee, who had exhibited some humane feeling on the subject, remarked that this was "a good way out of it." We do not quite agree with him, but consider that this man's resignation may have been the best way possible out of the difficulty, for if he had held on the terrible scandal might have been presented of the Asylum Committee, out of mere wantonness, defending a criminal against the central authority. Such a demonstration of the Committee's inability to understand their real functions or the very object of the institution over which they preside would have been equally deplorable and unnecessary.

We feel that acts of this kind—too frequent in Irish asylums and too lightly thought of—cannot be glossed over in our paper. Our Association and our JOURNAL exist primarily for the object of securing and maintaining the humane treatment of the insane, and it is chiefly due to the exertions of our predecessors in the Association and in the JOURNAL that barbarity is rare in British asylums and finds no sympathy in any quarter.

Some lessons may be drawn from these occurrences besides

those which are so obvious that they do not require to be inculcated. In the asylums in certain parts of Ireland restraint is used much more freely than is regarded right elsewhere. The Ballinasloe Asylum has long been distinguished as being the cheapest in Ireland as regards the item of "salaries and wages." This probably means an insufficient staff and the consequent supposed necessity for restraint. Mechanical restraint should be unnecessary in the asylums of to-day. It always ends in disaster. Its malignant influence is equally baleful to the patients and to the staff; it encourages cruelty as certainly as it ensures neglect and promotes degradation. Nor is this influence confined to the wards: it seems to penetrate to the very committee room, as this last example shows.

In one of the abortive Lunacy Bills which owe their paternity to the present Lord Chancellor a provision was inserted, according to which County Councils would have the power of electing on their asylum committees a certain proportion of persons who do not belong to their own body. The design evidently was to include philanthropic outsiders who might take a liberal view of the requirements of the patients. In commenting upon the bill in question we protested against this provision. An enactment of the kind exists in Ireland. How inoperative it is for the protection of patients is obvious.

With regard to the future of the patients in the Ballinasloe Asylum, we hope the hint that there is a point beyond which the most complaisant Government will not go may have some effect. Furthermore, we look to the newly-appointed Resident Medical Superintendent, who must be presumed to possess the confidence of the Committee, who commend him in the strongest language. In returning thanks for his appointment, Dr. Kirwan is reported to have said: "There is a large staff here and 1300 of the most helpless of God's creatures, and I will do my duty to them with the greatest justice and impartiality."

These be brave words! We have every hope that our colleague in Ballinasloe will maintain them with equally courageous acts. We trust that, disdaining easy methods of acquiring popularity by pandering to party feeling, he will show that he can merit the esteem of honest men by rising to the responsibilities of his great office and teaching his committee, no matter at what inconvenience to himself, their duty to the poor afflicted persons whom they, as well as he, are bound to protect.

Appointment of Medical Superintendent at the Ballinasloe Asylum.

The observer of contemporary life in Ireland must be struck by certain remarkable conditions. The passion of religious hatred smoulders on with an intensity inconceivable in other English-speaking countries, and although mostly hidden under the ashes of polite convention, is ever ready to burst out into consuming flame. The Local Government Act of 1898 is worked on strictly party principle, and, as the lines of political cleavage correspond pretty closely to the differences of religion, while these again are nearly coincident with social and racial distinctions, the results are curiously unlike those which the government of the people by the people has brought about in England.

The stranger to Irish methods must view with amazement the excitement which has arisen over the recent appointment of a Medical Superintendent for the Asylum for the Counties of Roscommon and Galway at Ballinasloe. It has been made the subject of protracted wrangles in the local weekly papers, has found its way into the Dublin daily press, and has even given rise to several questions in Parliament. Elsewhere we give such details of the proceedings in connection with this affair as will render it intelligible to the ordinary reader.

Any particular comment is hardly called for in these columns. Our specialty has never distinguished itself from the rest of our profession by illiberality of sentiment or a tendency to subordinate professional considerations to religious feelings. It is, of course, our opinion that appointments in any public service should be decided on service principles. Those who hold that motives of state policy dictate another course would, we think, do courageously and well to state plainly in their advertisements or prospectuses what the real conditions of employment are. At the same time we cannot think that in the future much serious injustice is to be feared, as it is perfectly understood in Ireland that the "spoils" system rules everywhere, and those who enter into public services will do so at their own peril.

Private or Pauper?

The note on this subject in our last issue requires correction in one or two matters of fact, which do not, however, affect

the argument, or the conclusion reached. It is stated that the maintenance rate charged to the Guardians is 14s., the maximum allowed by the Act. This is erroneous. The rate charged to the Guardians is 12s. 10d., and entirely covers the cost of maintenance, which is not, therefore, as stated in our article, supplemented from the county fund.

The rate charged at the Chichester Asylum for private patients is £1 1s. per week, and the question arises whether a patient, whose friends are paying the Guardians the full maintenance rate of 12s. 10d., is entitled to be classified as a private patient. This question we held should be decided in the negative. But there is a further problem: Suppose that the friends of the patient pay such a sum, beyond the maintenance rate in the Asylum, as to recoup the Guardians for the expenses, and to remunerate them for the services, referred to in our note on the subject; ought not the patient then to be classified as a private patient? On the reasoning applied to the matter in our note on the subject it appears that he should. But the Committee of the Asylum have fixed the rate to be paid for private patients at £1 1s., and decline to permit a patient to be regarded as private who pays less than this sum. This seems to be rather hard measure. Neither the county nor the parish is at any expense for the patient under such circumstances, and it seems that the question should be decided on grounds of public policy. The view of the Committee may be that, in the first place, to admit private patients at a less rate than a guinea is an injustice to those that pay that sum in full; and in the second, that it is against their own interest, and that of the ratepayers whom they represent, to accept, in any case, a lower rate, lest they may establish a precedent, and be compelled to take a lower rate in other, or perhaps in all, cases; or at any rate may foster a grievance in the minds of those for whom the full rate is paid. These are considerations which may well have weighed with the Committee, and which are entitled to respect. But there is much to be said on the other side. It is very desirable, on grounds of public policy, to avoid, where it can possibly be avoided, attaching the badge of pauperism to any man; and it is most desirable to encourage the friends of patients to make what effort they can to keep the patient above the level of pauperism. If this could be done by a payment slightly in excess of the

maintenance rate, though not quite equal to that charged for regular patients of the private class, it seems that much good would be done, and that the evils which we have indicated would be more than counterbalanced.

The notion that a person who is made to pay a guinea for the same service and accommodation for which another pays, say, fourteen shillings, is in any way damaged, or treated with injustice, seems devoid of foundation. The practice of the medical profession is to charge fees in proportion to the means of the patient; giving the same service for the lower fee that is given for the higher; and, as the treatment of insanity is a branch of medical practice, there seems no reason why the medical rule should not apply in the case of the insane. The practice might make a difficulty in obtaining the guinea in cases in which it is now obtained without difficulty, but this slight disadvantage does not appear entitled to weigh against the manifold advantages of the course here recommended. The Committee might well follow the practice of a few of the registered hospitals, and allow on application, as an act of grace, a reduction on their full charge of a guinea, in cases in which it is shown to their satisfaction to be impracticable to obtain so much.

C. M.

Part II.—Reviews.

Travail et Plaisir [*Work and Enjoyment*]. By C. FÉRÉ. Paris : Alcan, 1904. Pp. 476, large 8vo, 200 figures. Price 12 frs.

This elaborate and methodical work, described by the author in the sub-title as "new experimental studies of psycho-mechanics," is certainly among Dr. Féré's most important contributions to physiological psychology, if indeed it should not be put in the first place. It has some resemblance to his early and slighter book, *Sensation et Mouvement*, but it embodies a far more extensive and methodical body of work. The special characteristic of Dr. Féré's work generally is the unusual union of an immense literary knowledge of his subjects combined with all the practical familiarity of a laboratory student, and in the present volume this characteristic is very prominently and felicitously illustrated.

The problem which the author may here be said to have placed

before himself is a study of the results of stimulation on nervous activity. How does the application of a great number of various stimuli affect the output of work? This output is throughout measured, in a carefully regulated and uniform manner, by the ergograph. The subject throughout is the same, apparently the author himself. This is the strength, and to some extent the weakness, of the whole investigation. Being all carried out on the same subject, the observations are all comparable; on the other hand we cannot be sure that similar observations on another subject will yield exactly the same results. It would also have been a great aid in estimating the significance of the results to have had some knowledge of the general nervous make-up of the subject.

Many of the experiments here recorded have already been communicated to the Paris Society of Biology, and in their preliminary form aroused much interest. They can here be seen to form part of one methodical scheme. In thirty-seven chapters all the main methods of stimulation are systematically passed in review: rhythm, the various sensory excitations, vision, hearing (the effects of musical intervals being elaborately studied), taste and smell, pleasure and pain (the stimulating character of pain under conditions of fatigue being here specially notable), mental work and physical work, fatigue, suggestion, the influence of digestion, alcohol, coffee, tobacco, etc. The details of the various investigations bring out many curious and interesting phenomena, but the general conclusion is at all points the same. The immediate effect of stimulation is to increase the output of work, but the reaction after the stimulation is speedy and prolonged. The ultimate loss of working power under the action of stimulation, whatever the nature of the stimulation may be, is greater than the immediate gain, so that in the end the amount of work done without the application of stimuli is always greater than that done under the influence of stimuli. This general result is in harmony with many other recent inquiries, but it has never before been illustrated in so elaborate a manner over so vast a field. The diagrams are mainly reproductions of typical ergographic tracings. HAVELOCK ELLIS.

La Vision. By J. P. NUEL. Paris: Doin, 1904. Pp. 376, 8vo.
Price 4 frs.

Dr. Nuel, the professor of ophthalmology at the University of Liège, in writing this volume on vision for Toulouse's "Experimental Psychology Series," has sought, so far as possible, to eliminate the psychological element altogether. The sense organs, he maintains, must be studied by strictly physiological methods, without invoking sensations, volitions, etc. This standpoint has been maintained by some previous writers, but Dr. Nuel seeks to apply it rigorously to the whole of the subject. He accepts the view of Huxley, of late more verbosely set forth by Le Dantec, that consciousness is simply an epiphenomenon in relation to a fundamentally physiological process—a shadow that follows the body.

L.

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The author's point of view involves a considerable insistence on the comparative physiology of his subject, and a third part of the volume is devoted to vision in animals. In this field he triumphantly sweeps aside the statements of numerous authors in high repute concerning the sensations, judgments, and tastes of animals. Lubbock is in this connection specially marked out for attack. The author maintains that we ought no longer to speak of "comparative psychology," for in talking about the minds of animals we are like a blind man talking of colours. We are only entitled to speak of "comparative nervous physiology" or "comparative biology." He allies himself with the new school now being constituted under the auspices of Loeb, Bethe, Uexküll, T. Beer, etc. From this point of view the study of comparative vision consists in as exact a study as possible of "photo-kineses," or the movements which light provokes in animals. Such a study involves an entire new terminology on an objective basis—such a system of nomenclature as has been conjointly proposed by Beer, Bethe, and Uexküll. In this new terminology, accepted by Nuel, the word "reception" is applied to the chemical or physical process taking place in the peripheral termination of the centripetal nerve, in the case of light "photo-reception;" the rods and cones are photo-receptive organs, the movements of an animal under the influence of photo-receptions are photo-kineses or photo-reactions, and so forth. The totality of the processes provoked by a photo-reception is called a photo-reflex. The movements of living things towards or from light are called, without any mental or emotional assumption, positive or negative heliotropism.

With Dubois and Loeb, and against Lubbock and Forel, Nuel believes that in spite of the immense differences in the anatomical constitution of the photo-receptive organs, the rays that impress the human retina are equally efficacious throughout the animal series, and the rays that are inefficacious in man are equally inefficacious in animals. At the same time he throws doubt on the ability of insects and other lower animals to perceive colours. With F. Plateau he considers that it is by luminous intensity, and not by colour, that insects are influenced in visiting flowers; it is a matter of difference in the intensity of photo-receptions.

The earlier comparative section is perhaps the most interesting and important part of the book. The main problems of human vision are, however, touched upon, the author at many crucial points ranging himself with Reddingius and Parinaud. He strives so far as possible to maintain his strictly physiological standpoint, and discourages hypothesis; thus he throws aside alike the Young-Helmholtz and the Hering theories of colour-vision, on the ground that our knowledge is not yet adequate to justify the making of theories.

On the whole, Dr. Nuel has written an able and stimulating book, though it is somewhat controversial and sometimes a little fatiguing to read on account of its unfamiliar terminology. In its consistent one-sidedness lies alike the value of the book and its inconclusiveness. For the psychologist, as Dr. Toulouse seems to have thought, a rigidly non-psychological study of vision may be not unhelpful. At all events, it enables him to realise what he himself supplies.

HAVELOCK ELLIS.

Ungdomsaarenes Sindssydomme i Dementia Præcox af Hans Evensen, Bestyrer af Trondhjems Sindssygeasyl og Kriminal asylet. Kristiania, 1904. [Juvenile Insanity in Dementia Præcox.] By HANS EVENSEN, Superintendent of the Lunatic and Criminal Asylum of Trondhjem. Demy 8vo, pp. 300.

The author has devoted this volume to the definition and description of those forms of juvenile insanity which go under the names of dementia præcox or simplex, la démente précoce, demenza primitiva, developmental insanity or the insanity of pubescence. In the first part of the book Dr. Evensen analyses the symptoms one by one; he then goes on to describe his two forms, hebephrenia and katatonia, with graphic descriptions of special cases. Hebephrenia is often the outcome of a hereditary neurosis; it comes on slowly and gradually passes into the demented state without violent excitement. Dr. Evensen arranges his cases under two sub-divisions, hypochondriac and paranoiac. Katatonia comes on more quickly and passes through a phase of mental distress into a stuporose condition, in which rigidity of the muscles is one of the most prominent characteristics. Under this definition come the forms of melancholia attonita and catalepsy. Katatonia has never been favoured by British alienists. It is a definition difficult to grasp, and there are so many mixed and transitory forms that it is difficult to use it for the classification of patients. When people crack nuts they like to find kernels inside.

Dr. Evensen has a chapter on the historical evolution of these two forms, katatonia and hebephrenia. The first was introduced by Kahlbaum; the latter worked out by Kahlbaum and Hecker. In this survey the author shows a wide acquaintance with the literature of insanity—German, French, Italian, English, as well as Scandinavian. After considering the nature of the mental derangement, he lays down the differential diagnosis of dementia præcox from hypochondria, hysteria, epileptic insanity, chronic alcoholism, and general paralysis. He finishes with a chapter on the etiology of dementia.

The book is illustrated with thirty engravings, some of which portray the poses, physiognomy, and grimaces of the patients in a striking manner. Many of Dr. Evensen's cases have been studied at the great Asylum of Gaustad, near Christiania, where he was assistant-physician. We know of no treatise which gives so full an account of the various symptoms, pathology, and psychology of this form of insanity. The book would be improved by an index. It is to be hoped that this deserving work may be introduced through translations to wider circles of medical readers.

WILLIAM W. IRELAND.

Beiträge zur Ätiologie der Psychopathia Sexualis. By Dr. IWAN BLOCH. Dresden: Dohrn, 1903. Two vols., pp. 272 and 400, 8vo.

The author of these contributions to the ætiology of the sexual psychopathies is a Berlin skin and genito-urinary specialist, who has written a very elaborate monograph on the origin of syphilis. It is

also an open secret that he is the author of a remarkably learned work in three volumes on the social history of England in its sexual aspects.

The present work, Dr. Bloch states, is the outcome of his studies on the origin of syphilis. What, he was led to ask himself, is the origin of sexual perversions? He is convinced that the answer to this question is to be found in anthropological and ethnological investigation, and that sexual anomalies are individual or racial variations which are of universal occurrence, and tend to appear under conditions that depend on the particular epoch, the people, or the stage of civilisation. The sphere of the morbid element in such perversions is thus greatly restricted; they come very largely within the sphere of natural variation, whether we regard them as harmless or dangerous. The physician and the historian are alike incompetent, Dr. Bloch believes, to furnish an adequate explanation of these phenomena.

It is easy to see how, along the road on which the author set out, his conclusions were inevitable, and there can be no doubt that they contain a very substantial element of truth, which physician and historian alike may easily overlook. Dr. Bloch brings forward no new original contributions of fact from his own observation, and makes no efforts after psychological subtlety in the interpretation of the phenomena. The strength of the book lies in the anthropological point of view and, especially, in the author's immense erudition. One is accustomed to the plodding, learned, business-like, methodical books that are made—and very well made—in Germany, but even in Germany it must be rare for the busy specialist to possess so extremely wide a knowledge of what may be called the extra-medical literature of medical subjects. Dr. Bloch is especially familiar with those rare and expensive books in the by-ways of erudition which the ordinary student can rarely find in libraries and cannot always afford to purchase.

Among the very numerous subjects dealt with in these seven hundred pages are dress and fashions in relation to sexual attraction, homosexuality, sadism and masochism, flagellation, mixoscopia, necrophilia, erotic fetichism, exhibitionism. Concerning all these and many other matters, the book furnishes encyclopædic details and references which will prove useful to all who require to make themselves acquainted with the literature of sexual perversion. Its value is not impaired by its somewhat one-sided method of approaching these questions. The aspect of these subjects here presented is that with which the alienist is seldom familiar, and the importance of which he is apt to miss. From the careful psychological study of individual cases, it is not difficult to supplement Dr. Bloch's point of view, for we find that under the conditions of civilisation sexual perversions of all kinds, though they sometimes seem to occur in perfectly healthy and normal persons, are most likely to appear in individuals who, while not necessarily diseased, show various signs of mental and even physical anomaly. It is not without significance that even Dr. Bloch is compelled to place the word *psychopathia* on his title-page. It may be added, also, that he by no means wishes to restrict the activities of medicine in this field; on the contrary, he believes that the physician has yet by no means realised his responsibilities here, and that in the

future far more attention will be devoted than is now the case to questions of sexual hygiene. As Professor Eulenburg remarks in the preface he has written for this work, it forms a useful introduction for those who wish to gain an intelligent insight into a subject which intimately touches both the State and society, and which neither the physician nor the lawyer can afford to neglect. HAVELOCK ELLIS.

The Significance of Stigmata of Degeneration [Über der Wert der sog. Degenerationszeichen]. (Monats. f. Kriminalpsychologie, 1904.)
Näcke, P.

Dr. Näcke here returns to a question with which he has often dealt before. What is degeneration? It is still, he considers, impossible to answer that question definitely, and it will be a long time before our knowledge suffices for an adequate answer. In the meanwhile we may say that degeneration is a reaction markedly different from that of the majority of persons to various internal and external stimuli which disturb and may even injure the individual. Our definition must be physiological, and it must rest on a series of symptoms, not on a single sign. Degeneration, he adds, is not a disease, though it may be regarded as pathological; the degenerate may or may not be diseased, but they are always candidates for disease. Further, degeneration must be a general rather than a local condition, founded on an *ab ovo* invalid central nervous system. When we come to the stigmata we can best describe them as anatomical, physiological, psychological and social signs or results of degeneration, including all those characters which decidedly go beyond the range of variation, or, since we know little of the range of variation, which are apparently very rare variations. Näcke considers it important to be careful and cautious on these points, because the alienist must necessarily occupy a different standpoint from the anatomist who is entitled to reject the conception of degeneration, as is done by Stieda. What for the alienist is "a sign of degeneration" is for the anatomist "a rare variety." The alienist should likewise be extremely cautious in regard to committing himself to any opinion about atavistic characters. That is a matter which entirely belongs to the zoologist and anatomist. The immense importance of the stigmata of degeneration for the alienist lies in the fact that, as a vast body of data from all lands now shows, as we go from normal persons to the neurotic, the insane and the criminal, the number, degree and extent of stigmata increase *pari passu* with the extent of the mental defectiveness. He refers to his own well-known investigations showing that this holds true even of general paralytics. It is on these grounds that the doctrine of degeneration is not merely of theoretical interest but of great practical and clinical importance. In conclusion Näcke quotes many opinions of well-known alienists to the same effect, omitting criminal anthropologists, as it is well known that they have always recognised the importance of this doctrine and sometimes indeed carried it to excess. HAVELOCK ELLIS.

Traité de Pathologie Mentale. Published under the direction of Professor GILBERT BALLET, Paris 1903. Pp. 1600, with 215 figs. and six chromo-lithographs.

This ponderous tome is the joint production of Drs. Anglade, Arnaud, Colin, Duprè, Dutil, Roubinovitch Ségas and Vallon, under the direction of Gilbert Ballet. So powerful a staff of writers could not but produce an important work, and this work is of importance from the complete systematisation, from the immense amount of facts compiled and the vast amount of bibliography. It is indeed essentially a vast compilation, with careful bibliographic reference and systematic arrangement of the known facts in relation to mental disorder.

Any attempt at definite criticism is practically impossible, and an idea of the character of the work can perhaps best be given by an examination of a sample. Thus, under the heading "Accidental and Transitory Cerebral Intoxications," the drunkenness of alcohol and its varieties are treated at less length than that of carbonic acid and carbonic oxide (*ivresse oxycarbonée*). The symptomatology of alcoholic drunkenness is inadequately treated, and some thirty other intoxicants are little more than enumerated, the information given in regard to these being a condensation of that to be found in any work on therapeutics or toxicology, constituting an almost absolutely valueless compilation, and although extensive is far from complete. This is an extreme example of a characteristic that extends through much of the work.

Many of the subjects, however, are dealt with in an admirable manner, and in some instances with considerable originality.

The work is admirably printed, the careful sub-divisions, the distinct headings, and the italicising of important phrases, all tending to make it as easy of reference as is possible in the absence of an index. It may be commended, however, as an admirable systematic work of reference on mental pathology.

Part III.—Epitome of Current Literature.

1. Anthropology.

The Abnormal and the Degenerate [*Anormaux et Dégénérés*]. (Rev. de *Psychiat.*, Sept., 1903.) Rabaud.

This paper is a critical examination, admirable in force and lucidity, of the conception of degenerescence. The author discusses the question more particularly in the light of his personal observations in experimental teratology, the results of which he has published elsewhere

(*Bulletin de la Société Philomathique de Paris*, 1902 ; 'Archives Générales de Médecine,' August, 1903).

He points out that from the reactions of the embryonic cells to external influences there may, and often do, result histogenetic processes which, while quite different from normal processes, end nevertheless in the formation of healthy tissues whose mode of functioning is strictly comparable with that of the normal tissues ; the special characteristic of such tissues is either that they have developed in a region of the blastoderm which regularly gives rise to other tissues, or else that they differ from the average by excess or deficiency in their elements : withal they are anatomically well constituted, their protoplasm is healthy ; they are, in a word, abnormal but not diseased.

On the other hand, the reaction of the embryonic tissue may end in the production of cells whose protoplasm is disintegrated, or readily becomes so from trivial causes. Such cells are truly diseased.

Corresponding, then, to these two modes of reaction, we have to distinguish in congenital states the *abnormal*, clearly characterised by the integrity of their tissues, and the *diseased*, which—and which alone—are states of degenerescence. Abnormal are opposed to normal states, diseased to healthy states.

In the case of the brain, anomalies—adaptive variations with integrity of the tissues—are so frequent that they may be said to be practically the rule. They result from two distinct processes, in one of which there is development along the line of heredity, with deviation from the normal only by deficiency or excess, while in the other there is a deviation in kind.

The most noteworthy type of the first sort of anomaly is microcephaly. This condition is ordinarily the result of a delay in the growth of the brain, which acquires its adult development with a relative diminution in the amount of its substance, the deficiency affecting more particularly the association fibres. The microcephalic idiot, in a comparative point of view, is, no doubt, an inferior being, but he is not diseased ; he is not a degenerate. Naturally the same considerations apply to the intermediate states between pronounced microcephaly and the normal brain, and also to the states of what may be termed partial microcephaly, where, as in the musical or calculating prodigies, retarded growth in one direction is allied with a hyperplasia in another, producing an excessive development of some special memory.

Into the second category of the abnormal enter those cases characterised essentially by a mode of brain evolution different in kind from the normal mode. In these cases, with or without a quantitative difference from the average, there is a different mode of connection between the brain elements. We cannot recognise this histological difference by our existing means of investigation, but we are forced to infer it from the mental manifestations of these abnormal individuals—to their extravagant and unusual conceptions, to their original way of looking at things, must necessarily correspond an unusual disposition of the association fibres. A large number of *déséquilibrés* belong to this group. Eccentric and sometimes dangerous in ideas and conduct, they are nevertheless in no sense diseased ; they have no special tendency to the insanities, their nervous tissues are healthy. In the ordinary *déséquilibré* the abnormal

arrangement of the fibres which leads to bizarre notions is associated with a deficiency in number, which expresses itself in a lack of critical sense. But when, instead of that deficiency, we have an excess of the elements, the result is originality of conception combined with high critical power, which is the characteristic of genius. And this is the true relation of genius to madness. The man of genius is akin to the *déséquilibré*, to the pseudo-madman who is abnormal but not diseased; but neither one nor the other is akin to the degenerate.

The term degenerescence, on the other hand, in its exact sense—that in which Morel used it—implies the idea of organic decadence, actual or potential. In the pure degenerate this is the whole disorder; in number and arrangement his cerebral elements are normal, but they are of bad material and function badly. The varying degrees of debility down to idiocy are states of degenerescence; their mental manifestations are characterised by weakness, by poverty of ideas, by failure of attention, not by the original conceptions of the abnormal.

It is, however, obvious that these two conditions may be superposed; the abnormal brain may be also degenerate, just as in a series of abnormal embryos, all of which present some special variation, a few may have in addition a diseased state of the organ that shows the variation. The degenerate abnormal, therefore, is characterised by a combination of eccentricity and weakness. When the degenerate tendency is strong the disease masks the anomaly, and the result is debility with more or less oddity. When, on the other hand, the degenerescence is of slight degree it need not inhibit the exceptional faculties that go with the abnormal constitution, and so the individual may be capable of talented and original performance until some external influence brings out the latent taint. It is instances of this sort that have led to the entirely false view that genius is a product of degenerescence; in point of fact, far from constituting the essence of genius, any co-existing degenerescence merely impedes its manifestations.

The distinction clinically between the abnormal and the degenerate, and the separation of the elements of each condition in the degenerate abnormal in whom they are superposed, may be extremely difficult, but will ordinarily be possible by exhaustive examination of the mental and bodily state.

Anyhow, it is of very great doctrinal importance to remember that variation, which necessarily implies abnormality, is the condition of all evolution, and that, therefore, the tendency to reckon all departures from the average as evidences of degenerescence and to assimilate variation to disease, is manifestly absurd. W. C. SULLIVAN.

The Physical Signs of Degenerescence [*Les Signes Physiques de Dégénérescence*]. (*Ann. di Neurol.*, anno *xxi*, fasc. *i*, 1903.) Vaschide and Vurpas.

This paper is substantially a catalogue of the abnormalities of the different organs which by one observer or another have been denominated "stigmata of degenerescence."

The authors define a degenerate as "a subject who is born abnormal, different from the rest, remains so all his life, and dies abnormal;" and,

as the same conception of degenerescence does, in fact, seem to have inspired much of the literature of the question, though it may not often have found such frank expression, it may be easily understood that the list is a long one. The authors' commentary on the several stigmata is explanatory and not critical.

The paper is followed by a bibliography.

W. C. SULLIVAN.

2. Neurology.

The Fibres of the Corpus Callosum in the Human Brain from Frontal Sections of the Right Hemisphere after a Bullet Wound received Seven Years before [*Die Balkenstrahlung des menschlichen Gehirns nach frontalen Schnitten der rechten Hemisphäre einer sieben Jahre alten Schussverletzung*]. (Pamphlet, Berlin, 1903.) Richter.

In a pamphlet of forty-eight pages, Dr. Richter gives a most laborious study of the structure of the corpus callosum and the course of its fibres. His researches were founded upon a patient who died in the Berlin Asylum of Dalldorf in 1897, aged thirty-five. This man made a murderous assault upon his wife after he had been married for five months, and then shot himself on the right side of the head. Death was thought imminent, but he recovered consciousness in nine days. There was paralysis of the left arm and leg, which only partially passed away. An attempt was made to remove the bullet by trephining, but it could not be found. Seven and a half years later he died of extensive disease of the viscera of the chest and abdomen. The bullet had entered above and a little behind the ascending ramus of the Sylvian fissure, and passing backwards in a slanting direction through the posterior part of the upper frontal, it lodged in the posterior median gyrus of the left hemisphere. The brain was sliced and the sections examined with a view to noting the degeneration towards the corpus callosum.

The observations are illustrated by twenty-three engravings in the text. The result of Dr. Richter's researches leads him to doubt Meynert's view that the corpus callosum only connects homologous portions of the brain. The structure of this organ makes such a view difficult to understand, as the connecting fibres would need to descend from the upper portions of the hemisphere, to ascend from the lower gyri, and to hook round from the anterior and posterior lobes of the brain. Assuming that the fibres should retain their continuity, they would need to take devious routes from the division of the grey matter by sulci and convolutions.

If the corpus callosum connects fixed portions of the hemispheres, injuries to particular portions should be followed by degeneration of the fibres leading to the corpus callosum. Such degenerations have been already observed, but in too few cases and with too variable results to justify safe inferences. The task of tracing these degenerations is enormously difficult, and those who undertake it deserve much credit.

WILLIAM W. IRELAND.

Old and New Investigations upon the Brain [*Alte und neue Untersuchungen über das Gehirn*]. (*Arch. f. Psychiat., B. 37, H. 2 and 3.*) Hitzig, E.

In his fourth and fifth papers under this title, Dr. Hitzig treats of the relations of the cortex and the sub-cortical ganglia to the function of vision in the dog. He investigates the impairments of sight following lesions of the cortex, and whether they are of a hemiopic nature. The two papers fill 330 pages of the *Archiv*. He details his vivisections which are illustrated with numerous figures of the brains of the animals operated on, and of the scotomata made out on the retina. It is impossible to condense these descriptions. Much of his polemic is directed against the views of Munk. The Professor of Halle feels aggrieved that his colleague of Berlin has announced that he does not intend to reply to his criticisms. We much regret to learn that Dr. Hitzig feels obliged to discontinue his observations because his eyesight is almost lost.

As might be expected, the results of these extirpations of portions of the brain do not always agree; it is extremely difficult, if not impossible, to define the limits of the so-called sensory spheres. The impairments of sight were inferred from the way the animal regarded a piece of meat held in given directions. The reactions to light were not well marked.

As the outcome of five observations upon dogs, Hitzig found that considerable portions of grey matter could be removed from the middle of Munk's visual sphere without any recognisable impairment of sight, also that in those cases in which a disturbance of sight was observed the vision of the eye on the same side as the cortical lesion was as much or more affected, and the resulting scotomata were of the same nature on both sides. Hitzig holds that these observations fully negative the exclusive projection of the same side of the retina upon the lateral third of the visual sphere in the cortex.

As the result of his numerous investigations Hitzig found that blindness did not follow partial extirpation of the visual sphere, nor any relation between such extirpations and visual affections of given portions of the retina. Where this has been observed, it has been the result of the lesions implicating the optic radiations. Hitzig has found that the weakness of vision may follow the removal of various portions of the cortex and not exclusively from the occipital region where Munk has placed his visual sphere. Slight injuries of the grey matter of the frontal lobes may be followed by a loss of visual power which is more marked and lasts longer than after severe injuries of the so-called visual sphere.

As regards the connection of each retina with both sides of the brain, Hitzig admits that in general the lateral fourth of the retina receives more nerve fibres from both hemispheres than each retina does from the hemisphere of the same side. Hitzig will not, however, admit that the innervation of the retina comes exclusively from the occipital region. In opposition to the views of Munk he affirms that the extirpation of the occipital portion of the visual region never causes lasting blindness of the lateral fourth on the same side as the cortical lesion. Moreover, the scotoma of the eye of the same side regularly follows injuries of the

median portion of the hemisphere. Munk's A1 spot on the cortex is not in such a relation to the retina that its extirpation was followed by any specially grave injury of vision. On the contrary Hitzig assures us that A1 can be excised with even less marked injury following than other equally large portions of the cortex.

Partial extirpations of the middle, the posterior and the anterior parts of the visual sphere yield the same results, a more or less weakness of sight which has nothing in common with mind blindness or the loss of the memory of visual images. These results are supported by the observations of Monakow, Bernheimer, Goltz and Loeb. It is also to be borne in mind that any removal of the grey matter must lead to secondary softening of the optic radiations.

Goltz would only admit that lesions to the frontal lobes caused more injuries to the motor functions, and lesions to the occipital more injury to sight. One cannot indeed understand for what purpose the fibres of the optic tract should be directed to the occipital lobe if not for the prosecution of vision. However, as Hitzig observes, on removal of a portion of the frontal grey matter there follows without fail a combined injury to motor power and sensibility ; while injury to the sight does not always follow a lesion to the convex of the occipital lobe.

The following passage favours a view which I have long entertained : "When we reflect that optical images are realised in the lower animals endowed with eyes without these complicated nervous arrangements, the question arises whether the essential process of sight is not realised in the periphery, that is in the retina. The retina from its anatomical structure and its development must be regarded as a detached portion of the brain, and may therefore be regarded physiologically as such. The function of sight, beginning with those creatures who have a speck of pigment sensible to light up to the complicated apparatus of man, is accomplished by the production of images upon the periphery, while their comparison and association and judgment of these images are dependent upon more developed organisations."

Hitzig concludes his series of papers with the following observation : "For me the beginning of all vision consists in the ready production of optical images in the retina ; the prosecution of vision consists in the combination of these images with motor and perhaps with other impressions in the infracortical centres. The highest stage of vision consists in the apperception of these impressions of a lower order and their association with conceptions and feelings from other sources."

WILLIAM W. IRELAND.

The Eye Region and the Anterior Boundary of Munk's Visual Sphere.
[*Ueber die Augenregion und die vordere Grenze der Sehsphäre*
Munk's]. (*Arch. f. Psychiat, B. 37, H. 3.*) Kalberlah.

In vain does the Berlin professor promise to be quiet ; not content with heaping upon Munk the Pelion of his voluminous *Untersuchungen*, Hitzig gets his assistant to overwhelm him with the Ossa of another article in the *Archiv*.

Dr. Kalberlah adds twenty-two new observations to the ninety of Hitzig, which he affirms all go to disprove the visual centres as defined

by Munk. Of his twenty-two operations on the cortex made on dogs' brains in front of the anterior boundary of Munk's visual sphere a disturbance of vision was noted in seventeen cases; in five it was wanting. It appears from this that while injury to sight often follows extirpation of portions of the cortex in front of the anterior margin of Munk's visual sphere as well as behind it, sometimes this injury is not produced. It was found that the duration of the injury to sight is greater the larger the lesion is extended backwards.

Where injury to the optic reflexes was observed, it was, he holds, owing to the lesion to the cortex implicating the orbicularis centrum, the centre for the movement and protection of the eye, as described by Hitzig and Fritsch in 1870.

WILLIAM W. IRELAND.

On Deficiency of the Corpus Callosum in the Human Brain [Ueber Balkenmangel im Menschlichen Gehirn]. (Arch. f. Psychiat., B. 37, Heft 3.) Arndt and Sklarek.

These two physicians describe a case of deficiency of the corpus callosum in an imbecile girl who died in the Asylum of Dalldorf in her sixteenth year. The brain was subjected to an elaborate microscopic examination. The paper, which occupies forty-three pages, is illustrated by two pages of lithographic plates. Of the cross fibres of the corpus callosum nothing could be found save a tiny bundle of nerve fibres at the genu connecting the two hemispheres. These fibres lose themselves in the longitudinal bundle of fibres which passes from the occipital to the frontal lobes forming the roof of the posterior and lateral cornea of the ventricle, and during their whole course give out fibres to the different convolutions. There were abnormalities in the pillars of the fornix. The commissura fornicis, the psalterium, and the septum pellucidum were absent. The gyrus fornicatus presented an unusual appearance, and the fibres of the anterior commissure deviated from the usual course.

Onufrowicz and Kaufmann have described a longitudinal bundle of fibres in brains in which the corpus callosum was wanting. They regarded this as a separate structure present in the normal brain, and made apparent by the absence of the cross fibres of the corpus callosum, and called it the tapetum. Sachs, who had an opportunity of examining Kaufmann's preparations, considered the longitudinal fibres as an altered course of the normal cross fibres of the corpus callosum; the association longitudinal bundle is, in fact, a heteroptic trabs. Probst confirms this view. On the contrary, Anton and Zingerle have declared Sachs's explanation untenable. The cases studied by the former observer was one of atrophy of the trabs, save a portion of the genu in a hydrocephalic idiot. Doctors Arndt and Sklarek think that their laborious study of their own case support the theory of Sachs.

The authors recapitulate twenty-nine cases on record of deficiency of the corpus callosum. Most of these were idiots in whom there were other defects in the structure of the brain. Several of them suffered from epilepsy. They cite three cases in which the corpus callosum was absent without any deficiency of the intellect being observed: an intelligent man, fifty-eight years old (described by Nobiling-Jolly), a

field labourer forty-three years old (apparently of normal intelligence (Eichler), and a boy twelve years old of average intelligence, but colour-blind and disliking music (Klob).

The case described by Malinverni is put aside. This man, who had been a soldier, said to have been at one time melancholic, was thought of normal intelligence during most of his life. These results are confirmed by cases of destruction of the trabs through disease, and show that this structure is not necessary to the performance of the mental processes of ordinary life. Several of the individuals in whose brains the corpus callosum was found absent had reached an age between forty and fifty years. One man was as old as seventy-two.

It is to be regretted that those careful researches have not yet revealed to us the function of this great white tract of nerve-matter which holds the two hemispheres together.

WILLIAM W. IRELAND.

A Contribution to the Study of the Cerebral Localisation of Chorea and Epilepsy [Contributo allo studio delle localizzazioni encefaliche nella corea e nella epilessia]. (Riv. sper. di Freniat., vol. xxix, fasc. 3). Ravenna, E.

The author describes a case of chorea followed by epilepsy, a somewhat rare association, and gives a detailed account of the macro- and microscopic examination of the brain. Before bringing forward his own case he makes an excellent summary of what has been published on the subject, dwelling more especially on the work done on chorea alone. He believes that the association of this latter with epilepsy is due more to the intensity or extension of the primary originating lesion than to any difference in the causation of either. He mentions among other theories as to the pathogenesis of chorea that of Koch—that all cases are due to a “chorea virus” acting on the nerve centres. Berkley held that the origin was infective, and found in a case of chorea with acute endocarditis lesions of the cerebral vessels and nerve elements similar to those found in diphtheria. This view is held by many. Cesaris-Demel has published a case of chorea caused by an encephalo-myelitis arising from infection by the *Staphylococcus pyogenes aureus*, in which marked lesions of the pyramidal cortical cells were present. Several investigators found atrophy of the convolutions, especially in the parietal region. Murri, from his examination of two cases of polyclonia and four of chorea, came to the conclusion that the motor region of the cortex is the seat of the mischief in both diseases. The author holds the same opinion, and this is pretty generally accepted.

The author's case was an idiot girl, æt. 11 years, on admission into the asylum. Her mental development was very small and her habits extremely degraded and destructive. She was extremely choreic in her movements. Chorea appeared at the age of four, and was attributed by her parents to fright caused by some cows. Her face, head, and all her limbs were a prey to continuous choreic movements. There was no marked defect in her physical development. Eighteen months after her admission into the asylum epilepsy supervened. Her

fits, at first frequent, became rare, but three years after she died in status epilepticus.

At the necropsy, the skull was found much thickened, especially over the frontal lobes. The dura mater and pia arachnoid were also thickened and hyperæmic. The brain weighed 32 ozs. There was marked atrophy of the frontal lobes on either side. Starting from the Rolandic fissure the frontal lobe could be divided into two parts. The first part, comprising the commencing portion of the three frontal gyri, was triangular in shape, and here the thickness of the convolutions was normal. The second part, comprising the rest of the frontal lobes and extending round the anterior curve of the brain back as far as the optic chiasma, was in a state of atrophy. The convolutions were only from 1 to 2 mm. in thickness, of gelatinous consistence and of a whitish colour. The atrophy was symmetrical, and there was a well-defined line of demarcation between the normal and the atrophied part.

On microscopical examination, the atrophied area seemed to be composed of fibrillar tissue of a neuroglia type. Bundles of fibrils could be seen running in different directions: in some places their direction was exactly opposite to the usual one. In the apparently normal part of the frontal lobes the ganglionic cells were small but preserved their contour. They presented an incipient hyaline degeneration, and the nuclei stained diffusely, the chromatic network being observed with difficulty. Here and there round the capillaries in this layer were seen small round uninuclear cells which stained diffusely and were not neuroglia cells, but gave rather the appearance of a connective-tissue arising from the adventitious coat of the vessels, and were apparently of recent origin.

In the atrophied region, with a higher objective, the fibrillar bundles could be seen to form a reticulum, the spaces of which were empty and increased in size the nearer they approached the surface. The fibrils constituting their walls contained numerous nuclei presenting the characteristics of neuroglia tissue. A few larger nuclei could be seen with traces of a chromatic reticulum and retaining a slight amount of irregular protoplasm surrounding them. These were probably the remains of much atrophied nerve-cells, and were only found at the margin of the atrophic region. To sum up briefly, what the author found is as follows:—

A diffuse and well-marked gliosis, and almost complete disappearance of the nerve-cells in the atrophied portion of the frontal lobes on either side: Hyaline degeneration of the protoplasm and nuclear atrophy of the nerve-cells in the part of the frontal lobes not suffering from atrophy, and in the precentral gyrus.

The author holds that the clinical symptoms can be easily explained by what has been found.

Where the atrophy was most marked and where the cells had almost completely disappeared no functioning power was possible. This was the condition of the greater part of the frontal lobes. Hence the true idiocy presented by the patient. In the non-atrophied portion of the frontal lobes and in the precentral gyrus, a moderate degree of protoplasmic degeneration and nuclear atrophy was present in the ganglion cells. The functions dependent on these cells were not

suppressed but merely altered. Hence first the chorea and then the epilepsy. The next question is, What was the primary cause of these cerebral lesions? It is not probable that it could have been due to the thickening of the calvarium, as the atrophy was not limited to the superior surface of the brain but extended round the base as far as to the optic chiasma. The glioses in the frontal lobes should rather be attributed to that anomaly in the development of the nerve centres which is termed microgyria. Different opinions are held as to the pathogenesis of this condition. The most likely hypothesis is that a morbid process, probably of an inflammatory nature, at an early date, attacked a great part of the frontal lobes, causing degeneration and disappearance of the nerve tissue and substitution of neuroglia tissue in its place, as always happens in similar cases. Resulting from this alterations of a less pronounced character occurred secondarily in the cortical motor area which produced, first choreic phenomena, and later either from increase in severity or by extension, the epileptic attacks.

A. J. EADES.

3. Physiological Psychology.

On the Pathology of the Consciousness of the Ego [Zur Pathologie des Ich-Bewusstseins]. (Arch. f. Psychiat., B. 38, H. 1.) Pick, A.

In 1873, Krishaber, under the title of *De la Névropathie Cérébro-Cardiaque*, described a derangement of the recognition of personality of which Taine, in his work on the *Intelligence*, declared that he had found more instruction in it than in a whole metaphysical volume on the substance of the ego. It is not uncommon in asylums to meet with patients who affirm that they have become another person that they are not, or, as in the old song, they say, "This is no me." They find their feelings and their tastes all altered, or they have no feelings at all in some parts of their body. Their own voice is strange to them. Conflicting influences or unusual desires disturb their mind. Thus the string of sensations and thoughts recognised as belonging to themselves is so altered that it is only a slender thread of memory, or the repeated recognition of others, which sustains the sentiment of continued personality. More rarely this sentiment is wholly lost, so that they insist that they are some quite different person. Professor Pick has described an instance of this kind. The patient was the wife of an inn-keeper. She was thirty-three years of age. She had for some time been in weak health, when suddenly there came over her a feeling as if she had lost the current of her thoughts; it seemed as if the thoughts were not her own. When she walked she knew that her legs carried her, but it seemed as if they moved of themselves. Her actions and dealings did not seem to proceed from her own agency. It was not her mind—her thought (she had the sentiment of not being the same person)—her very dreams were altered. When she did not go about or do something she did not know that she was in the world. She said, "I do not at all recognise myself." This condition was worse in the afternoon. It

appeared to her that everything was far off, though nothing appeared smaller than usual. If she did not see herself she would not know that she existed. Her own voice seemed altered. She continued working without the feeling that she was doing so; if she did not see the effects of her work she would not know that she had worked at all. She had no memory: her brain seemed dead. She took no interest in outward things, but was fearful that she might become insane. There was some paræsthesia in the face, which seemed confined to the region supplied by the second branch of the fifth pair in the right. There was complete iridoplegia on the same side, less so on the left. The patient was suffering from constitutional syphilis, but treatment thus indicated had no effect. In this patient the sense of self-activity outgoing from the will, the feeling of agency distinguished from passive sensation, was impaired or suspended. Pick finds in such cases a schism of the personality—the ego who thinks seems separate from the person who acts and whose motions the ego only knows by observation.

The professor describes at length another case of the kind—a young married woman. It does not appear that with these patients the sentiment of personality is wholly lost. The person compares his present feelings with his former ones, and notes a strange difference which he is much at a loss to explain. He retains the consciousness of having been something other than he is; something is altered, taken away, or super-added.

WILLIAM W. IRELAND.

A Case of Depersonalisation and Possession [Dépersonnalisation et Possession chez un Psychasthénique]. (Journ. de Psychol. Norm. et Path., Jan.—Feb., 1904.) Raymond and Janet.

The *Journal de Psychologie Normale et Pathologique* is a new review appearing under the joint editorship of Professor Janet of the Salpêtrière, and Dr. Dumas of the Sorbonne. As the names of the editors suggest, it will be more especially devoted to those complex psychic states on the borderland between the normal and the abnormal to which so much elaborate study is now being devoted in France. This opening number contains a critical discussion by Ribot of the value of the *questionnaire* in psychology, an exposition by Flournoy of certain mediæstic phenomena, a theory by Grasset of the paramnesic phenomena of the “*déjà vu*” (with an interesting letter from the novelist Bourget, who has throughout life experienced manifestations of this kind), and a considerable number of abstracts of recent periodical literature, including Russian, etc.

Janet himself, in conjunction with Professor Raymond, contributes a discussion of a case which well illustrates his skill in unravelling and setting forth complex and dubious psychic conditions. The case is that of a young man of twenty-nine, who for eighteen months has been subject to crises during which he walks about his room behaving in all his attitudes, movements and expressions like a girl. He explains that the young work-girls of the quarter of Paris in which he lives have “eclipsed” him, and that he is gradually losing his own personality.

The interpretation that obviously presents itself is that here we have a case of somnambulistic hysteria modified, as sometimes happens, by

a suggestion coming from the environment. This explanation cannot, however, be accepted. The crises involve no loss of consciousness, and no anæsthesia or amnesia or real and complete hallucinations; he can always stop the crises when he wishes, and the entrance of another person often suffices to stop them. The phenomenon is the obsession of a "psychasthenic," to use the term now employed by Janet for a group taken out of the older group of neurasthenia and fully studied in his last book, *Les Obsessions et la Psychasthénie*.

Such psychasthenic obsessions are, in the authors' experience, rare. In this case there was bad heredity; the father died of general paralysis, the mother is neuropathic. The subject himself has been through the fatigues of a Brazilian expedition, in which he displayed considerable ability, and he has had syphilis; his general health is much impaired, and he has lost his aptitude for work. He spends his time in wandering about the streets. He suffers from what has been called "social aboulia." The social system is wrong, he says; he cannot adapt himself to it; he desires the life of nature, the society of primitive people. This social inaptitude, the authors remark, is a chief stigma in all psychasthenics; "Rousseau, the most illustrious of psychasthenics, thus protested against society and worshipped nature." The present subject is very timid, has no friends, and only associates with people below him in the social scale. His thoughts are much turned in a sexual direction; the influence of women is a stimulus that he desires; he gazes in the faces of the women he meets to find, as he expresses it, a kind of morphia for the evils he suffers from. But his timidity, and still more his social inaptitude, stand in the way of any intimate relation with the girls whom he gazes at and follows; the fault, he says, is theirs, because they are so much below his ideal of them; they are even malevolent, and thus it is that he attributes to them the troubles of personality from which he suffers. In this history we have the explanation of the crises.

The case would tend to develop, the authors believe, into delusional insanity, but under treatment the condition is improving and the subject is beginning to show a renewed aptitude for work.

HAVELOCK ELLIS.

The Psychology of Dreaming [*Contribution à la Psychologie du Rêve*].
(*Am. Journ. Psychol.*, July—Oct., 1903.) Beaunis, H.

This issue of the *American Journal of Psychology* is a "commemorative number" of over 400 pages, dedicated to Professor Stanley Hall—as the founder of experimental psychology in America, and a pioneer in the systematic study of children—on the occasion of the twenty-fifth anniversary of his doctorate in philosophy. A large number of the leading American psychologists and some in Europe have contributed to this volume, which includes an excellent portrait of Stanley Hall and a bibliography of his writings. This special number is edited by Professors Sanford and Titchener.

The place of honour is given to a notable paper by Beaunis on dreaming. It is not often that a scientific worker of such eminence is willing to publish so frankly the results of his own auto-vivisection. Possibly he is

encouraged by the fact that the publication is issued in a remote part of the world. Throughout the greater part of life (he is now 74) Beaunis has taken a scientific interest in his own dreams, recording his observations immediately on waking. He finds three phases in all dreaming—(1) the phase of initial excitation (external or internal sensations, sometimes, perhaps, simple vascular or chemical changes in brain); (2) the mental phase of recollection; (3) the phase of sensori-motor irradiation. Whatever period of his life he dreams about, he always preserves his actual personality. He notes, as others have before, that a *forgotten* memory may reappear in a dream, and gives an instance in which his eye, in glancing through a book, had taken in impressions which only became conscious a few hours later in a dream (the present writer has recorded a precisely similar case). He has never been able to produce dreams, to determine their character, or to put an end to them at will. He believes that he dreams every night, but he is not prepared to assert that no sleep is dreamless. He is a visual of incomplete type; and in the waking state, when recalling images with closed eyes, they appear vague and uncertain, as it were *en grisaille*; his dreams have the same character, but certain objects may present a definition and colour comparable to real objects. The other sensory images present nothing striking. Sounds are deadened; he has never had any dream of smell, and only one of taste. Organic sensations, especially those of the rectum and bladder, play a large and often very grotesque part in his dreams. Motor sensations also play a large part, especially a dream of flying a yard or two above the ground in bounds of ten to twenty yards, in which he has had the delightful sensation of solving the problem of aerial locomotion. This dream entirely ceased after the age of 50. He has never dreamed of writing, drawing, or modelling, all of which he practises in waking life. He cannot confirm the statement of De Sanctis that the dead are not seen in dreams until long after death; he has dreamed of dead friends shortly after their death, and in the dream has sought explanation as to why it is they are still alive. A great deal of mental activity may be displayed in dreams; "in a dream one may analyse, compare, judge, reason; the attention may be voluntarily turned in a particular direction; the most abstract questions may be discussed; for the most part the reasoning is false, the discussions peculiar, the conclusions erroneous, though it is not always so." Emotional experiences in dreams, except in childhood, have never been very intense. Up to the age of 30 or 35 his dreams were chiefly visual and motor; then, as he gave himself more and more to psychological work, and especially after he became Director of the Laboratory of Physiological Psychology in Paris, they became more intellectual. Soon after the age of 60, grotesque dreams disappeared altogether. While his dreams have possibly been affected by his waking avocations, there are two notable exceptions—hypnotism, to which at one time he devoted much attention, never entered into his dreams, and the Franco-German war, which he lived through in an official medical capacity, and which absorbed the whole of his life while it lasted, never once entered into his dreams. At present his dreams are mainly visual, the motor element playing an even smaller part.

Beaunis considers that dreaming has played a very important part in

the history of humanity, that the myths and legends of early civilisation were largely moulded by dreams, that the visions of the mystics often find their key here, and that the religious and philosophical conceptions of the soul has been slowly elaborated from the same source.

HAVELOCK ELLIS.

The Knowledge of Colours among School Children [*Über Farbenkenntnis bei Schulkindern*]. (*Zeitsch. f. Psychol. u. Phys. d. Sinnesorgane.*) Lobsien, Marx.

This investigation was undertaken at Kiel in the hope of throwing light on various interesting questions bearing on the development of colour perception. It deals exclusively with girls, between the ages of 8 and 14, 289 in number, and brought up in an urban environment. The first series of experiments was designed to test the correct recognition of colours by name. Red stood highest; at nearly every age this colour was correctly recognised and named. Blue comes next, only a few of the youngest children failing. Yellow and green follow at a considerable interval, a rather remarkable fact in view of the interest which young children have usually been found to take in yellow; while at every age the children were found to be more or less defective as regards orange and violet and indigo. The cause of the gradual development of colour perception with age is psychological, Lobsien believes, rather than physiological; the colours which the child sees most frequently he knows best. Orange was never called "yellow" but frequently "red," and still more frequently "brown." Violet was by the younger children most usually called "blue," but at a later age often "red."

In the matter of colour preferences the interest of the younger children was at least as keen as that of the older children. Red was always a favourite colour, though to a less marked degree among the elder children. Orange, whether when compared to red or to yellow, was rejected by nearly all. Blue is preferred to indigo and yellow, but by no means to violet. Experiments were also made with the preferences for colour combinations. No colour combination was preferred under all circumstances, and the so-called harmonic combinations, red-green, orange-blue, yellow-violet, were by no means general favourites. It is noteworthy that in many respects the youngest and the oldest children showed an approximation, the intermediate children widely varying. No demonstrable influence was exerted by the appearance of puberty.

HAVELOCK ELLIS.

The Measurement of Fatigue [*Sur les Méthodes de Mensuration de la Fatigue des Écoliers*]. (*Arch de Psychol.*, Oct., 1903.) Schuyten, M. C.

In experiments on fatigue, especially in school-children, various workers have come to the conclusion that fatigue is greater in the afternoon than in the morning, and consequently that efforts should not be demanded of children in the afternoon. Schuyten, investigating the auditory memory for figures in the primary schools at Antwerp, finds

that there is a serious fallacy in these experiments. The observers who have noted this rapid increase of fatigue in the afternoon have always begun their observations in the morning. Schuyten, following the same plan, reached the same conclusions. But when he began the observations in the afternoon, and continued them on the following morning, the results were reversed: the morning work was inferior to that for the previous afternoon, though not to so marked an extent as is the afternoon work when it follows on the morning work. The general conclusion is that results obtained at the beginning are always better than those obtained at the end; we are concerned not so much with a diurnal curve (which is not, however, excluded by Schuyten's remarks) as with the greater interest felt by the children in the earlier stages of a new experiment.

Like Lobsien and others, Schuyten finds that the memory of girls is distinctly better than that of boys.

HAVELOCK ELLIS.

4. Clinical Neurology and Psychiatry.

On a Case of Unilateral Hallucinations [*Sopra un caso di Allucinazioni Unilaterali*]. (*Il Manicomio, anno xix, No. ii.*) Pianetta.

The patient, a single woman, æt. 48, without known hereditary taint, was admitted to the Brescia asylum with hallucinations and delirious conceptions of a mystic content. The hallucinations, which appeared to be the basis of the persecutory ideas, were visual, auditory, and visceral. The first-named were infrequent; they were generally of a mystic character, were bilateral, were referred to a distance, and were suppressed by the interposition of an opaque body. The visceral disorders consisted of peculiar sensations, as of an indwelling personality, referred mostly to the right side of the thorax and to the epigastrium. On rare occasions the patient also felt on the left shoulder a peculiar sensation, which she compared to the pressure of a bird's claw. The most constant and intense of the hallucinations were the auditory, and these were connected almost exclusively with the right ear, in which the patient was totally deaf from chronic otitis media, dating back to childhood. These hallucinations varied from vague noises up to distinct phrases, attributed by the patient to her mother, to her confessor, to God. She often localised the voices in the region of the thorax, where she experienced the cœnæsthetic disturbances. Attention increased the distinctness of the hallucinations, and their content changed with the matter of the patient's conversation.

Only on a very few occasions were any voices heard in the left ear, and their character and the circumstances of their occurrence were entirely different from those of the right-sided hallucinations. Notably, they never appeared except in relation with hallucinations of other senses referred to the same side: thus on one occasion a few words were heard in the left ear at the moment of feeling the claw-like pressure on the left shoulder; and another time the voice heard in the left ear was referred to an unknown figure seen standing on the same

side. While the voices heard in the right ear spoke chiefly of religious matters, and were often in the form of reproaches, those heard in the left ear were emotionally indifferent.

The point to which the author draws special attention is the very slight development of the left-sided hallucinations: this would, he considers, rank the case as intermediate between the ordinary unilateral hallucinations and the bilateral hallucinations, where the voices heard on either side are of opposed character.

In reference to the case the author discusses at some length the recent literature of unilateral hallucinations, drawing the conclusion that no adequate theory has yet been found for their explanation.

W. C. SULLIVAN.

Extracampine Hallucinations [*Extracampine Hallucinationen*]. (*Psychiat. Neurolog. Wochensch.*, Sept. 19th, 1903.) Bleuler.

Under this title Professor Bleuler discusses certain hallucinations which are projected outside their corresponding sensory fields. Examples are given: (1) A patient sees things out of the window though his back is turned to the window, and his head covered by bedclothes withal; (2) a delirium tremens patient complains that jets of water play upon the back of his hand from a certain corner of the ceiling; he does not see them, but he feels with the skin of the back of his hand that they come from this particular spot; (3) a patient looks at the nurses and sees them with their ordinary faces and forms; she does not look at them and she sees them with Chinese faces and pigtailed; (4) a patient is conscious of mice on the walls; she does not see them but feels their movements in her skin; (5) a patient, who generally lies in bed on one side speechless and stuporous, yet on an occasion states that heads look constantly at her from all the four walls of the room, even from that one which is behind her and which she cannot see; (6) the professor sleeps and dreams that he is walking through the village street; he sees and hears a conversation between a man and a maid in an inner room in an ancient mill long ago pulled down, that stood so far from the village street that it would have been impossible to see and hear anything occurring therein.

Extracampine hallucinations have, Bleuler considers, a certain theoretic significance. They indicate with certainty that projection of images outwards can occur without participation of the peripheral organ. They are found among hallucinations of vision and of touch. Since the whole world forms the physiological auditory field, extracampine auditory hallucinations are not, properly speaking, conceivable. In connection with taste they are conceivable but have not been observed.

Without here discussing the value of these observations or entering on the question of whether or not they fully bear out Bleuler's repeated contention that they prove the absence of the participation of the peripheral sensory expansion in certain hallucinations, we must express our surprise that the author has not dealt with hallucinations occurring in those who have lost a sense, hallucinations of hearing in the deaf and of vision in the blind.

CONOLLY NORMAN.

Senile Dementia: a Clinical Study of Two Hundred Cases with particular regard to Types of the Disease. (Journ. of Nerv. and Ment. Dis., Feb., 1904). Pickett, W.

The author found that out of two hundred and sixty-nine patients over the age of sixty admitted to the Insane Department of the Philadelphia Hospital during a period of about three and a half years, only sixty-nine were not senile demented.

He believes senile dementia to be an entity and separable clinically from various acute and chronic psychoses occurring in old age, and that therefore the term "senile insanity" is useless and even confusing. The essence of senile dementia is a quantitative change—a mental loss; but the more obvious change is frequently qualitative—excitement, depression, delusion—so that the disease may appear in a guise simulating one of the pure insanities—mania, melancholia, paranoia, etc. The mental loss is probably the source and spring of the entire disease; at any rate, he points out, the mental enfeeblement which ultimately appears in every case is peculiar and progressive and survives the qualitative changes.

He divides his cases into simple-confusional, excited (maniacal) and depressed (melancholic), and paranoid, and shows the results of his observations in several interesting tables.

He uses the term "simple-confusional" because he believes that confusion of some degree is present in all types of senile dementia, and that probably a simple senile dementia when it advances rapidly becomes senile confusion.

Although he has grouped seventeen cases under the excited (maniacal) type because they showed something of the flight of ideas and hilarious expansiveness of mania, yet he believes that true mania probably never arises in old age, and that cases diagnosed as "senile mania" are, ordinarily, delirium or confusion with excitement.

On the other hand he agrees with Kraepelin and others that many patients the subjects of so-called senile melancholia—in whom there is a conscious, reasoning depression—are true melancholics and recoverable.

The paranoid type of senile dementia, he considers, has been little dwelt upon by the standard authors, but is of the greatest medico-legal interest, as delusions more or less systematized may make the patients disagreeable, unjust or even dangerous to their families, although when met with in the wards of an asylum they are "uninteresting" senile demented.

He demonstrates by his tables that physical deterioration is greatest in the simple-confusional type of senile dementia, and is progressively less in the excited, depressed and paranoid, and that hereditary degeneration is the converse in each of these types in a like order.

A W. WILCOX.

Delirium Grave: a Critical Study, with Report of a Case with Autopsy. (Journ. of Nerv. and Ment. Dis., Mar., 1904.) Pritchard, W. B.

Perhaps no single type of mental disease, says the author, presents such confusion and chaotic indefiniteness of individual conception and

description as the affection which forms the subject of this paper. In support of this assertion he mentions no less than thirteen synonyms used by alienists of note to describe the particular form of mental disease which he, following Spitzka and Gray, prefers to call delirium grave. That the disease is a very uncommon one is the only detail in which there is absolute unanimity of opinion. The majority are agreed that the affection is peculiar to women, generally attacking them between the ages of twenty-five and forty-five years.

After reviewing the literature on the subject of etiology, the author is of opinion that two groups must be recognised, one of infectious or traumatic origin, with more or less gross or organic structural damage; the other representing the composite and somewhat indeterminate resultant effects of hyperactivity of cell function from non-toxic conditions, dynamic or nutritional.

He then proceeds to give a clear and vivid clinical description of the disease. So accurate is Spitzka's conception and delineation of the disease in question as to warrant, in the author's opinion, the permanent and distinctive association of his name with it. He also quotes Coston's terse and accurate clinical definition as "a very acute febrile disease of the brain, usually fatal, attended by wild delirium, hallucinations, and great disturbance of motor functions!" Pathologically, Pritchard recognises two distinct groups of this disease corresponding to the two etiological groups before described. The diagnosis of a typical example of this disease should present no difficulty. The prognosis is extremely grave, most writers agreeing that recovery never occurs, and that death usually takes place. Those who escape death pass into a state of more or less marked dementia which is progressive. The author has found no instance in the literature of a second attack.

The treatment should be founded broadly upon the basis of combined etiological and pathological findings.

In conclusion, Pritchard presents a detailed and graphic history of a fatal case occurring in a patient with whom he had been intimately acquainted for many years, and appends the report of the autopsy in her case.

A. W. WILCOX.

Graves's Disease and its Relation to the Psychoses. (Medicine, March, 1904.) Rogers, A. W.

This article contains an analysis of thirteen cases of Graves's disease complicated by various forms of insanity observed during the passing of six hundred patients through the Milwaukee Sanatorium during a period of a little over five years.

Practically all these cases presented a neuropathic or psychopathic history, which the author believes to exist in nearly every case of Graves's disease. He is of opinion that this disease and insanity are only manifestations of the same vicious condition underlying an unstable constitution; thus we can scarcely speak of either as a complication of the other, but rather consider insanity as a further development of the neurasthenic and hysterical conditions observed in even the mildest cases of Graves's disease—the psychosis developing in the more unstable.

The cardinal physical symptoms were not affected by the mental complications in the case of any of his patients. He agrees with the majority of authorities that although there is no characteristic psychosis complicating Graves's disease, types of mania are found in over three-fourths of such cases.

In conclusion, he states that although Graves's disease may complicate and usually aggravates the mental disease, yet it does not in the average case make the prognosis less favourable.

A. W. WILCOX.

On Contrary Actions. (Journ. of Nerv. and Ment. Dis., Jan., 1904.)
Pick, A. (Prague).

Professor Pick, in this paper, details at length a case showing marked contrary actions, the so-called "reversals" described by S. Weir Mitchell in the April of the previous year in the same journal.

The latter author showed that the condition might manifest itself in two different forms: either the opposite of the thing willed was done, or else what it was meant to do was done in a way which reversed the usual manner of doing it. Pick thinks that the first class, however, permits of further sub-division, depending whether a delusion or an imperative idea is at the bottom of the condition. His own case, he says, corresponds to the former, while apparently most of the others in literature, of which he shortly recapitulates all that have come to his knowledge, have some imperative idea to account for them.

A. W. WILCOX.

Multiple Sclerosis with Dementia: a Contribution to the Combination Form of Multiple Sclerosis and Dementia Paralytica. (Amer. Journ. of the Med. Sci., Dec., 1903.) Hunt, J. R.

This is an interesting case of the extremely rare combined or mixed form of these two diseases. The author has only found seven recorded cases, of which he gives abstracts of the clinical histories, and of the pathological findings, in the six in which an autopsy was made.

His own case was that of a woman, fifty-three years of age, presenting the symptoms of multiple sclerosis followed by dementia. On admission she showed spastico-ataxic gait, nystagmus, ataxic and intention tremor of arms, impulsive laughter, syllabic speech, and double optic neuritis. Her symptoms dated back for four years. Mentally there was considerable enfeeblement and much impairment of the memory, which increased and terminated in dementia. She died four years after her admission.

At the autopsy thickening of the calvarium was found, opaque and thickened meninges, marked atrophy of the frontal lobes, granular ependymitis and dilatation of the ventricles. Disseminated plaques of sclerosis were present in the brain, cerebellum, pons, medulla, and cord. Histologically the characteristics of general paralysis and of disseminated sclerosis were found.

It is of interest to note that in none of the recorded cases with autopsy was this combination form recognised clinically.

A. W. WILCOX.

On the Age of Commencement and Influence of Heredity in the Pathogenesis of Primary or Precocious Dementia [Sull' età di comparsa e sull' influenza dell' ereditarietà nella patogenesi della demenza primitiva o precoce]. (Rev. Speriment di Freniat., vol. xxix, fasc. 3.) Levi-Branchini Marco.

This article is a contribution to the study of primary dementia, and deals with the age of onset and influence of heredity in the pathogenesis of this mental disorder. The author gives in excellent tabulated form the percentage of those so afflicted in Ferrara Asylum as compared with those suffering from other forms of insanity, the course of the disease and its clinical varieties in the two sexes. He prefers the term primary to that of precocious dementia as it seems better to indicate the idiopathic nature of the disorder. In his researches he finds that in 90 *per cent.* of the cases there was normal development of the psychical condition, and as 40 *per cent.* occurred in adults of from 30 to 50 years of age, the term precocious seems rather an anachronism.

Two hundred and thirty cases formed the material for this paper: of these 125 were under his actual care, the rest were from the asylum records. The division into clinical varieties adopted was that of Kraepelin. Catatonic phenomena were frequently met with in the hebephrenic and paranoid forms, while the genuine and lasting types of catatonia were so rare as to almost give rise to the doubt if this really deserved a separate entity, but should rather be merged in the other two varieties. One hundred and thirty-nine were cases of hebephrenia, 34 of catatonia, and 57 of the paranoid variety. In tabulated form the author gives the result of his clinical and statistical researches, and sums up the whole under the following twelve headings:

1. Apart from variety of forms primary dementia appeared in 53 *per cent.* of the cases before the age of 25, and was about equally a disorder of youth and middle age. In the earlier period it assumed almost specifically the hebephrenic (64 *per cent.*) and the catatonic forms (79 *per cent.*), in middle life the paranoid form (82 *per cent.*).

2. Primary dementia represented 28 *per cent.* of the mental diseases in the asylum (13.8 *per cent.* men, and 14.2 *per cent.* women).

3. The absolute number of males was about equal to the females (62 and 63 respectively).

4. Both sexes were attacked almost equally.

5. Of 100 cases 56 were of the hebephrenic form, 8 of the catatonic, and 36 of the paranoid, but comparing 100 of each sex there was a marked difference in the results as given below:

	Males.		Hebephrenia.		Catatonia.		Paranoid.
100	...	48	...	9	...	43	
Females.							
100	...	64	...	7	...	29	

6. As seen above hebephrenia attacked principally the female sex, paranoid chiefly the males, and catatonia both almost equally.

7. Hebephrenia was the variety of primary dementia that undoubtedly

held the preponderance (64 to 48 *per cent.*), and next the paranoid (43 to 29 *per cent.*).

8. In 59 *per cent.* of cases heredity was traced in a marked degree, both psychopathic and neuropathic, but almost entirely the former. Syphilis, tubercle, alcohol, and apoplexy entered very little into the family history.

9. Morbid heredity was found equally in both sexes, and in the hebephrenic and catatonic varieties, less marked in the paranoid form.

10. In 90 *per cent.* of the cases there was normal development of the psychical state. Catatonia seemed to attack by preference those of lesser intelligence. In 10 *per cent.* the mental state before death was that of moderate mentalisation; in 24 *per cent.* it was poor; in 10 *per cent.* very much impaired, and in 6 *per cent.* good.

11. The hebephrenic form of primary dementia occupied in both sexes the first place among the clinical varieties of this mental disorder.

12. The fundamental clinical forms of primary dementia were only two in number: the hebephrenic and the paranoid. A. I. EADES.

A Case of Phenomenal Talent for Counting in an Imbecile [*Ein Fall von Phänomenalem Rechentalent bei einem Imbecillen*]. (*Arch. f. Psychiat.*, B. xxxviii, H. 1.) Wizel, A.

The subject of this study, Sabina W—, was a woman æt. 22 years, who had been for four years an inmate of the Psychiatric Compartment in the Jewish Hospital at Warsaw. She came of a long-lived family and there was no nervous heredity. The family had an especial gift for music but none for arithmetic. Up to the sixth year of her life Sabina grew up a healthy and intelligent child. She went to school and could read, write, and count. At the beginning of her seventh year she was seized with a grave attack of typhus fever, from which she seemed to make a fair recovery, when she was suddenly visited by epileptic attacks which succeeded one another for three days. After they had ceased she remained in an unconscious state for several days. She ceased to see and speak, was dirty to her clothes, ate feathers and other stuff. She had a stupid look and recognised no one. She became much emaciated. After some days the power of vision returned, she learned to speak, as if for the first time. Her intelligence slowly improved; when she was eleven she was about the level of a child of three. She had delusions of persecutions and fits of excitement. Admitted to the hospital she was small of stature, and looked no older than fifteen or sixteen, although she was twenty-two. The palate was high. She suffered from epileptic seizures in the form of the *petit mal*. For about ten days at a time she would remain apathetic, seeking the sun in summer and the stove in winter. Then she would suddenly become violent, complain, shout, and threaten. This state would last another ten days. Her intelligence was found to be weak. It was especially deficient in the power of generalising and gaining abstract ideas. The sense of past time was most inexact. When asked how long she had been in the hospital she answered two weeks, then nine hundred weeks, seventeen years, two years. She could not tell how old she was, or how many brothers and sisters she had; she cannot read or write, cannot

read figures, and only talks upon simple subjects such as engage the attention of young children. She does not care for music. She makes little distinction of persons, cares for nobody, and pities no one. She will not even keep herself clean.

When she came into the hospital Dr. Wizel was told that she had a remarkable faculty for arithmetic, being especially good at multiplication. He found that she could multiply two figures by two, giving the answer almost immediately and with few mistakes. She did not multiply so quickly if the multiplier and multiplicand were of the same power.

The weakness of imbeciles at counting is so well known that it has been used as a legal test. Cases have been published in which imbeciles were skilful at figures; but I never met with any of them. To teach them arithmetic is very difficult. Those who are laboriously dragged through addition, multiplication, and subtraction are often arrested by division. Sabina was found to be better at division than at addition and subtraction. Still, the performances in division were often surprising. She divided 576, 560, and 336 by 16 with astonishing quickness; also 225 and 270 by 15.

Considering her performances in multiplication and division, her failures in simple addition were remarkable. Of these Dr. Wizel quotes the following:

$$\begin{array}{ll} 57 + 63 \text{ given as } 141. & 68 + 35 = 102. \\ 48 + 53 = 163. & 58 + 24 = 92. \\ & 36 + 64 = 104. \end{array}$$

In subtraction she was equally deficient. She often gave the right answers, but much more slowly than with multiplication and division.

Sabina possesses another power which is rarely met with in ordinary people. Once Dr. Wizel asked her, "What is the product of 23×23 ?" She quickly gave 529, and added, "That comes to as much as 33×16 and 1." In a similar manner, when he asked her, "How much is 14×14 ?" she gave the number 196, and voluntarily added, "That makes the same as $12 \times 16 + 4$." Another time she gave the relative values—

$$\begin{array}{l} 729 (= 27 \times 27) = 24 \times 30 + 9; \\ 1296 (= 36 \times 36) = 81 \times 16; \text{ and} \\ 784 (= 28 \times 28) = 49 \times 16. \end{array}$$

Dr. Wizel found that in her reckonings Sabina makes much use of the numbers 16 and 10. It was difficult to get Sabina to explain by what mental processes she so rapidly got her answers. Dr. Wizel, however, gives a few examples:

$45 \times 18 = ?$ Answer: 810. Explanation: She has multiplied 90 by 9.

$$78 \times 78 = ? \quad 39 \times 39 \times 4 = 1521 \times 4 = 6084.$$

All the great calculators have methods of their own. Wizel refers to the treatise of Binet, *Psychologie des Grands Calculateurs et Joueurs d'Échecs* (Paris, 1894). Binet had studied Inaudi and Diamandi, who were examined by the Academy of Sciences in Paris about ten years ago. I saw Inaudi at an exhibition in Edinburgh. A line of figures, casually suggested by members of the audience, was multiplied by another line, and the product given with astonishing rapidity. The

cyphers were written on a black-board behind the performer, who stood out upon a plank. They thus could be read by the spectators, but not by Inaudi. Nevertheless he was able to hold in his memory, and repeat all the figures. In adding he used to begin at the left side with the higher numbers. He dealt with the numbers as sounds—that is, they had to be repeated to him orally—whereas Diamandi regarded them as seen figures. Binet observes that, besides the capacity of keeping the figures in memory and rapidly calculating, it is of importance that the reckoners should keep up the use of their talent: for without practice they seem to lose much of their facility. The possessors of this wonderful faculty generally come of obscure families who never showed particular skill in arithmetic.

WILLIAM W. IRELAND.

The First Symptoms of Neuropathy in Children [Die ersten Zeichen der Nervosität des Kindesalters]. (Pamphlet, oct., pp. 38, Berlin, 1904.) Oppenheim.

In this pamphlet, Dr. Oppenheim treats of the symptoms met with in children of a neuropathic temperament. He does not deal with organic diseases of the brain, but confines himself to such minor affections as early neurasthenia and hysteria. In childhood, he observes, we do not find the associated groups of symptoms which characterise these affections in the adult, but a great variety of isolated nervous derangement. The ordinary reactions of pain and pleasure are exaggerated, transposed, or fail to appear. The emotions shown by laughing and weeping and other outward signs are of abnormal force. Excessive timidity, delirium with hallucinations and frightful dreams by night, even day-dreams are sometimes observed. There is fear or horror at the sight of some beast, or of any new animal. There may be troubles of digestion, dislike to particular articles of food, palpitation, coldness of the hands and feet, and other vasomotor disorders. Some of the professor's observations are curious. He had a little patient who had such a hyperæsthesia of the hair of the head that she could not suffer it to be combed. This peculiarity was inherited from her mother and grandmother. Dr. Oppenheim had another patient, a lady who was troubled with the same hyperæsthesia which had come down from childhood. She was also affected with hysteria and neurasthenia. The sensibility of the scalp was greater at times, but in general she could not get her hair combed, or wear a net, and her locks appeared in an untrimmed state. He also mentions a boy who was so distressed at any attempt to brush and comb his hair that it was always in an untidy condition.

Oppenheim observes that in infantile diplegia, a born organic brain disease, the motor reaction usually following upon terror is much increased, though he cannot find that this is accompanied with greater mental emotion. In one case noises such as striking the table with the hand caused tonic spasms in the muscles of the trunk and limbs, and these did not cease to follow the frequent repetition of the stimulus. Dr. Oppenheim had a patient, a boy eleven years of age, in whom vomiting was caused by everything that excited him, especially by anything that promised him pleasure, such as a drive in a coach or on the

railway. He used to abstain from food before such excursions in the hope that he should thus escape vomiting. His father had suffered from the same distressing tendency up to his twenty-first year.

The author observes that none of the numerous symptoms which he mentions should be disregarded or attributed to moral perversity. They should be noted as signals warning those who have the charge of children of the danger of more serious nervous troubles. He does not enter into the question of prevention or treatment, which has been already considered in his pamphlet *Nervenleiden und Erziehung* ("Nervous Affections and Education").

WILLIAM W. IRELAND.

5. Treatment of Insanity.

General Survey of the Treatment of Epilepsy. (*Gaz. des Hôp.*, Feb. 13th, 1904.) *Vires, J.*

In order to deal more completely with the subject, the therapeutics of epilepsy are sub-divided according as they are adapted (*a*) to avoid the attack; (*b*) to deal with the outburst itself; (*c*) to treat its sequelæ; (*d*) to overcome the morbid tendency.

Sub-division (*a*) deals with the exciting causes, so called, and their suppression. The removal hence of all causes of irritation reflex or central, such as may be conveyed by light, sound or mechanical excitation, etc.—The determination and combating of any infectious or toxic element which may underlie the seizure; the suppression of any nervous strain intellectual or emotional, etc., etc. It will not be necessary to develop further this sub-division.

Sub-division (*b*) can be passed over and likewise (*c*) and we may proceed straightway to the consideration of the means to be adopted to overcome the convulsive potentiality of the case, sub-division (*d*).

The class of medication now in question addresses itself to the instability or explosive character of the nervous system and labours to make more stable or less excitable the cells of the grey matter.

Solanaceous Plants: Belladonna and hyoscyamus represent this group; the former has been advocated by various authorities, *e.g.*, in association with bromides in epilepsy generally (Gowers) in nocturnal epilepsy (Hughlings Jackson), in impulsive and vertiginous epilepsy (Pierret), in nocturnal incontinence of urine, which Vires says is a masked form of epilepsy (Trousseau).

The Valerian group: The use of valerian and its derivatives in epileptiform seizures is of very ancient history, but in modern times it has become comparatively restricted, and the like is true of the "antispasmodic" group of the oleo-gum-resins asafoetida and galbanum and of the aromatic bodies such as musk, amber, civet and castor.

The oxyde and salts of zinc have had, and still have a considerable vogue in the treatment of nervous affections, including epilepsy. It is common to associate zinc with valerian either as the valerianate of zinc or else to prescribe some inorganic pre-

paration of zinc along with the extract of valerian : not infrequently the extract of henbane is added to the formula.

The salts of silver, gold and copper are of somewhat uncertain value, but there is sufficient evidence in their favour to establish their efficacy in certain cases of epilepsy, and, though the staining of the skin by silver salts when prescribed for any length of time does constitute a serious drawback, yet the urgency of the case may justify our placing before the patient the choice between the symptoms and the argyria as Dr. William Murray, of Newcastle, has insisted.

Peucedanum Sylvestre (le selin des marais), which appears to be the same as the *Persil des marais*, which name has been given to the *Oenanthe fistulosa* and also to the *Apium graveolens* or celery in its wild state—has been employed as an anti-epileptic: it is apt to cause gastro-intestinal irritation.

Cotyledon umbilicus or Pennywort combines according to Dr. Vires a very happy alternative action with complete harmlessness. Salter, Bullar, Graves, Fossagrives have reported well of it.

Borax is next discussed—its value in cases rebellious to bromides, its drawbacks arising from the disturbances of the alimentary tract and of the skin which may compel its discontinuance. It is to be administered as far as possible, in time, from the meals, therefore the very first thing in the morning and the very last thing at night. The drug is very slowly eliminated, and has been detected 41 and 53 days after its administration has ceased. The upper limit of dosage, with very few exceptions, should not exceed 12 grammes (186 grains) in the 24 hours.

The bromides (of potassium, sodium, ammonium, calcium, lithium, strontium, arsenic, zinc, nickel, gold, rubidium and camphor) show an undoubted power of blunting the irritability of the cells of the motor area, and this group is relied on almost exclusively by a majority of practitioners. A combination of bromides is stated to be more effective than an equivalent dose of any one bromide. Charcot's formula for combining the bromides is :

Bromide of potassium, 20 grammes.

Bromide of sodium,

Bromide of ammonium, aa 12 grammes.

Distilled water, 1000 c.c.

Following Gilles de la Tourette and Féré, Dr. Vires counsels the administration of an antiseptic with the bromides, *e. g.*, benzoate of soda, naphthol, salicylate of bismuth, salol, carbon (plain or with naphthol).

The rules of administration according to age and sex are discussed, and likewise the question of individual tolerance. Idiosyncrasy, so-called, Vires thinks to be explicable in nearly every case by functional inadequacy of liver, of kidney, of intestine or of stomach, and he advises that the permeability of the renal tissue be tested by the excretion of methylene blue and the functional activity of the hepatic cell by the possibility of inducing alimentary glycosuria or not.

Dosage is to be regulated by the severity of the disease, number and strength of attacks, and the effective dose is to be arrived at by experiment

and by the "cycle" method of administration, *e.g.*, first week, 3 grammes *pro die*; second week, 4 grammes; third week, 5 grammes; fourth week, 4 grammes; fifth week, 3 grammes; sixth week, 4 grammes, and so on. The dosage to be raised or lowered till that dose is reached which is best able to control, *i.e.*, to blunt effectually the neurone. *This saturation dose is to be maintained constantly even during the inter-currence of mild temporary disorders; the occurrence of marked pyrexia alone is to contraindicate.*

The bromides are never to be abruptly intermitted or their dosage rapidly reduced.

The difficult question of the adequate dose and the length of time of its maintenance and the mode of reduction, if reduction is permissible, are then dealt with. Dr. Vires criticises here the value of Gilles de la Tourette's pupil symptom and doubts its practical value. The symptoms of acute and chronic bromism are next considered with their treatment.

The value of the hypochlorisation (dietetic) treatment of MM. Richet and Toulouse is confirmed by Dr. Vires—he finds that under the conditions thereby secured the bromides are much more active.

Flechsigs's method of combining a course of opium with the bromide cure has, in the opinion of Dr. Vires, a definite value in certain cases of epilepsy, and he accords it therefore a place in spite of the objections which have been raised on the score of danger and the need for careful surveillance which the opium dosages necessitates. Vires thinks that the indication for the use of opium is asthenia, with depressed nutrition and circulation, including a cerebral anæmia, and that the bad results which have been recorded on authority may have been due to an administration in an opposite state of body, a state of erethism with vascular hypertension. Perhaps the value of his remarks lies rather in the claim for individual treatment of the epileptic as against a treatment by rule and measure which has in view a morbid entity, epilepsy.

The employment of Adonis vernalis along with bromides as advocated by Bechterew has been tried by Vires but without results which could be attributed to this drug.

The treatment of the status epilepticus is of vital importance, and in first line come the anæsthetics and sedatives—chloroform, chloral, croton chloral, nitrate of amyl. The anæsthetisation of the patient must proceed with all the precautions which are adopted during the production of an operation narcosis. If there are difficulties in the way of the inhalation of chloroform, it may be administered in draught or in enema, after the manner of the exhibition of chloral.

Again, it is necessary to individualise the treatment, and Vires quotes one case in which bleedings and saline subcutaneous injections with purgation and intestinal disinfection seemed to be the agents by which recovery was effected.

HARRINGTON SAINSBURY.

Contribution to the Study of the Therapeutic Action of Bromipin. (Bull. de Med. Ment. de Belgique, Dec., 1903.) L. de Moor.

The preparations bromipin and iodipin have been referred to on several occasions in the *Journal of Mental Science*. Bromine and iodine

are here combined with a bland fixed oil, the oil of Sesame, and in this form the advantages of the bromides and iodides are said to be presented without certain of the drawbacks belonging to these same. Bromipin is prepared in two strengths, viz. : a 10 *per cent.* and a 33 $\frac{1}{3}$ *per cent.* Administration is either in emulsion or capsule, by the mouth, or as an injection *per rectum*. Recently Merck has prepared tablets of bromipin with a basis of condensed milk and sugar (bromipinum solidum saccharatum). In equivalents we have 7 grammes of 10 *per cent.* bromipin and 15 grains of potassium bromide ; 2 grammes of 33 $\frac{1}{3}$ *per cent.* bromipin and 15 grains of potassium bromide ; 1 tablet of bromipinum solidum and 10 grains of potassium bromide. The capsules contain 2 grammes of 33 $\frac{1}{3}$ *per cent.* bromipin. Bromipin has been tried in all those affections in which bromides are indicated, *e.g.*, in epilepsy, the major and minor forms of, as also in epileptic insanity ; in the various, multiform manifestations of neurasthenia (according to Dornblüth the influence of the drug is especially marked upon the cardiac irritability which is prominent in many neurasthenics) ; in a variety of nervous disorders such as hysteria, chorea, neuralgia, neurotic agrypnia, sick headache, the convulsions of infants, whooping cough, etc., etc.

Dr. de Moor records seventeen cases in which bromipin was employed. These included cases of epilepsy, of insomnia, of hysteria, of headaches, of neurasthenia, etc. In all save one more or less benefit occurred, but he is careful to add that in other cases failure or very incomplete results were recorded.

As the outcome of his observations, Dr. Moor concludes that bromipin has a very real anti-epileptic power, probably equal to, and in some cases surpassing the alkaline bromides in activity ; that it does not excite acne and may even cause a bromide acne to disappear ; that in virtue of its oily nature it influences beneficially certain cases of epilepsy with malnutrition, more particularly if the patient is scrofulous ; that it is often accepted by patients who fail to detect the bromine element to which they may have taken a rooted dislike ; that by reason of its slow elimination its administration can more safely be interrupted than in the case of the alkaline bromides, the suppression of which is sometimes followed by serious symptoms. On all these counts Dr. de Moor is of opinion that we have in bromipin a most valuable alternative to the alkaline bromide.

As to dosage, he advises that in epilepsy the drug should be administered freely : 2—5 tablespoonfuls (cuillerées à soupe) of the 10 *per cent.* preparation *pro die*, or an equivalent quantity of the 33 $\frac{1}{3}$ *per cent.* strength. In the various forms of neurasthenia and of neurosis the dose will be smaller, 1—2 tablespoonfuls of the 10 *per cent.* strength or 2—4 capsules in twenty-four hours.

HARRINGTON SAINSBURY.

Lunatic Asylums as Hospitals, and the Relation of the General Practitioner to the Treatment of Insanity. (Glasgow Med. Journ., Nov., 1903.) Whitelaw, W.

In this article (the latter part of which is a review of the twenty-eighth annual report of the Glasgow District Asylum) the author speaks

of the responsibility of the position of the general practitioner when suddenly called upon to decide as to a person's sanity, and therefore of the importance of his possessing some acquaintance with the causes and symptoms of insanity.

After enumerating many of these he deals with its treatment from the general practitioner's point of view. Referring apparently to cases of acute mania and melancholia he enjoins rest and sleep, the latter to be obtained if possible without the use of hypnotics, but by mild counter irritation of upper part of breast and back, warm compresses to abdomen, hot bottles to feet, massage of head and neck, and a warm bath in the evening. Food he gives every three hours, the largest meal at night. If drugs are required he recommends 15 drop doses of tincture of digitalis every three hours and if that fail 3ii of paraldehyde *per rectum*; then tonics and gentle exercise as soon as possible. He finds that from three to six weeks of this treatment is generally necessary, but he is firmly of opinion that asylum treatment for both rich and poor is to be preferred to home treatment in most cases of insanity.

A. W. WILCOX.

6. Sociology.

The Alleged Influence of Urban Life in Producing Degeneration [*Genealogie und Anthropologie*]. (*Int Cbl. f. Anth., H. 5 and 6, 1903.*) Kohlbrugge, J. H. F.

It is commonly believed that urban life is an important factor in decreasing the birth-rate and producing a tendency to degeneration. Dr. Kohlbrugge disputes this belief, and brings forward evidence from Holland which, he believes, tends to show that it is unfounded. The senatorial families of Amsterdam, the ruling oligarchy, can be traced through several centuries. Of these families 205 retained their ruling position from the end of the sixteenth to the end of the eighteenth centuries, and of these at least fifty-nine (or 29 *per cent.*) still survive; they have survived, that is, at least nine generations of urban life (some have been settled in Amsterdam for five hundred years), and a few of them still show a remarkably high birth-rate. Before the nineteenth century, moreover, Amsterdam was an unhealthy city. The Portuguese Jews furnish the author with another example. They came to Amsterdam at the end of the sixteenth century, and represent the Jewish aristocracy; a certain degree of degeneration, at all events a tendency to neurasthenia, etc., is to-day traceable among the Portuguese Jews of Amsterdam; Kohlbrugge is inclined to put this down to constant consanguineous marriages. Notwithstanding, of 166 families who in the eighteenth century had already been long established in Amsterdam, at least half (and probably more) may still be traced there. Kohlbrugge further compares the birth-rate in Dutch cities with that in the country. Alike in country and town (Rotterdam and Dordrecht) the poor have more children than the rich, but the mortality is also greater among the poor, so that the ultimate advantage of the poor is but small. The well-to-do classes have a somewhat higher birth-rate in the country than in

the towns, but the poorer classes have a higher birth-rate in the towns. The percentage of still-born births for all but the highest social class is larger in the country; on the other hand the number of children who reach the fifth year is for all classes somewhat higher in the country. As the mortality remains greater among the working classes after as well as before the fifth year, it is found that the net fertility of the well-to-do family is really greater than that of the working-class family. On the whole, Kohlbrugge holds, the Dutch evidence shows no real indication of a degenerative influence due to urban life, and if the town-dwellers sometimes have but few children it is because they wish to have few children.

HAVELOCK ELLIS.

Contribution to the Legal and Psychological Judgment of Spirit Mediums
[*Zur forensisch-psychiatrischen Beurtheilung spiritistischer Medien*].
(*Arch. f. Psychiat.*, B. 37, H. 3.) Henneberg.

Dr. Henneberg bases his paper on the description of Anna R—, who was sent to the Hospital of Charité in Berlin that her claims as supernatural communications might be closely examined. This woman was born in 1850. When six years old she told her mother that she saw ghosts in full daylight; later on she claimed to have second sight and predicted fires and railway accidents, some of which actually followed. She worked as a servant in several families. When twenty years old she married a blacksmith and had eight children. She was about forty-two years of age when she gave out that she had frequent converse with spirits. She fell into the hands of an impresario with whom she held about 500 sittings which attracted much notice. Anna R— was very susceptible; but she distinguished between the artificial hypnotism and the trances in which she involuntarily fell. After being hypnotised she retained a dim memory of what had happened. During the trances she used to utter pious speeches said to be communicated by spirits. Some of these gave names; but would furnish no details by which their past life could be traced. She affirmed that flowers and other objects fell around her, some of which she had previously seen in the hands of the spirits. She wrote sentences in which she said her hands were guided by the spirits. She said that she had no knowledge of what she wrote until it was read to her. Converse was also held with the ghosts by means of knocks. She saw spirits with her eyes shut. Some of her sayings and rhymes uttered during the trances were taken down by a reporter.

Those who had faith that she was truly a medium argued that Anna R— had not sufficient education to prepare these speeches. They were of a religious and poetical character. Dr. Henneberg, however, observes that she was a woman of some intelligence and that there were indications that she had prepared these sayings out of what she had read. The physicians of the hospital had many sittings and put her pretensions to strict tests. All her attempts at thought-reading failed. A close scrutiny of the handwriting said to be executed under the guidance of the spirits showed that the handwriting was all of the same character.

The spirits who took possession of Anna R— as a medium were

numerous, comprising Luther, Louis II of Bavaria, Moltke, and other distinguished personages. They found out the woman from whom she bought the flowers, which she said were brought to her by the spirits. The impresario bolted and left Anna to face a trial; witnesses appeared in her favour, who testified that the communications from the ghost world were real. She was convicted of deceit in forty-eight cases, and of attempted fraud in twelve cases, and sentenced to imprisonment for eighteen months. Many people thought the sentence too hard; some believed in the reality of her visions; others considered her a passive tool in the hands of the impresario.

Dr. Henneberg shows much acquaintance with the literature of occultism. He cannot understand why men of intelligence have faith in spiritism. Mr. Crookes and Professor William James and some other distinguished men have declared their belief that communications from the dead have come through the medium; but none can deny that many of these mediums are mere cheats. As Wundt has observed, it requires a professional juggler to detect some of their tricks. Nevertheless Dr. Henneberg admits that some mediums are honest.

In May, 1892, the medium, Valeska Töpfer, was tried before a petty court in Berlin because she claimed to possess supernatural strength. She was condemned to imprisonment for two years, but on an appeal to a higher court the sentence was reduced to imprisonment for six weeks. She had carried on speaking in trances, producing writings from spirits, and untying of bonds for years at Berlin, and had been detected in her manipulations by a man who pretended to be her servant.

This woman appeared in court at Thiendorf as a witness against another medium, who called herself "the Messenger of Christ," and averred on oath that she had practised as a writing medium for thirty years, and then as a medium for materialising spiritual forms. She had deceived the public, among others Professor Zöllner. She had spoken herself when she gave out that spirits spoke through her mouth; she explained that she has retained full consciousness when in the trance state. She thought she was doing a good work if she got people to believe in spirits. V. Töpfer gave out afterwards that she had been forced by threats to make this confession. "The Messenger of Christ" was the wife of a shoemaker called Ulbricht. She has for years carried on spiritual seances in Dresden and founded a religious sect in Thiendorf, from whom she raised considerable sums of money, on which account she was accused of fraud. During the trial she acknowledged that she herself had produced the knockings and apparitions and that she remained conscious during the trances, only when she had spoken a long time, up to two hours, she did not know any more what she said. An expert witness, Dr. Lehmann, averred that neither in general nor during the trance sittings was the accused insane. This woman was condemned to two years' imprisonment.

Dr. Henneberg mentions four further cases of similar deceptions. A medium called Mussato, condemned in Trieste; the well known medium, D. Home, who got £60,000 from a widow in London at the request of her deceased husband; a woman called Geipel, found guilty of deceit in Zwickau in 1896; and also a professional somnambulist in Zurich,

who professed to diagnose and treat diseases. In writing on this case, Dr. Forel described the clairvoyante as a woman of fifty-six, who had from her youth been hysterical. She fell into the somnambulistic state every day at certain hours. Dr. Forel did not think this to be simulated. He considered that in the waking state she was not deranged, but in the sleep-walking state she was like a person in the drowsy condition of drunkenness.

Dr. Henneberg does not think the question of sanity and legal responsibility of mediums can be considered apart from the reality of the trance states. In voluntary somnambulism the patient is not in possession of his own will; but when the trance has been brought about or assisted by the subject's own will or desire the case is different.

WILLIAM W. IRELAND.

Recent Researches on the Action of Alcohol in Health and Sickness.
(*British Journ. of Inebriety*, Jan., 1904.) *Sims Woodhead.*

The Lees and Raper Memorial Lecture, delivered by Dr. Sims Woodhead at Cambridge in November, 1903, is published under the above title in the quarterly Journal of the Society for the Study of Inebriety.

A large part of the lecture, as is implied by its title, is devoted to a review of the work of other observers on the food-value of alcohol, its action on the various tissues, its influence on immunity and on phagocytosis, etc. In addition to this critical digest, which is too well done to admit of further condensation, the author publishes a series of interesting personal researches on the action of alcohol on protoplasm.

For his experiments, Dr. Woodhead selected Beyerinck's phosphorescent bacillus as a form of protoplasm of low organisation, presenting a definite and easily measured functional activity. When this bacillus is grown in fish-broth and in the presence of air it gives off a peculiar phosphorescent light readily seen with the naked eye, and so actinic that it will affect the photographic plate. A twenty minutes' exposure sufficed to give a very distinct image of the hole through which the light was allowed to pass. On the addition of ethylic alcohol in quantities from 12 *per cent.* down to 7 *per cent.* the light-producing function of the organism is completely paralysed, and no image can be obtained even with a two and a half to three hours' exposure. The tube containing 5 *per cent.* of alcohol gave a very faint glow that could just be photographed in two hours and a half. Increasingly stronger images were given with the 4 *per cent.*, 3 *per cent.*, and 2 *per cent.* tubes, though in no case so distinct as those obtained from the alcohol-free tube. With the 1 *per cent.* and $\frac{1}{2}$ *per cent.* tubes, however, there was no perceptible difference from the control tube. As the organism manifests its special phosphorescent power only in the presence of oxygen, it was almost impossible in the conditions of the experiment to prevent rapid evaporation of the alcohol when operating with small doses. For this reason it was not possible to decide whether minute quantities of alcohol might not exert some stimulant action on the light-producing function.

It is pointed out that in any case the organism is a very low form of protoplasm, and that the phosphorescent function does not require anything like the same complex conditions necessary for the continued life

and activity of the nerve-cell, and will probably to that extent be more resistant to the immediate action of alcohol.

The paper is illustrated by a plate showing the various photographic results referred to.
W. C. SULLIVAN.

Medico-Legal Report on a Case of "Moral Insanity" [Rapport sur l'État Mental du Nommé D—— inculpé d'Outrages]. (Arch. de Neurol., Oct., 1903.) Raynaud.

This detailed report is published by its author as an illustration of the difficulty of dealing with a type of "borderland" case which is unpleasantly familiar in asylum and prison experience.

The individual to whom it refers is of insane heredity; he suffered from sunstroke in youth, and he is addicted to absinthe, and shows a characteristic susceptibility to its influence. For over twenty years—he is now 41—he has pursued a career of insanely criminal conduct. He has been repeatedly in prison for assaults, swindling, threats, slander, etc.; he has been on ten occasions the object of special medico-legal inquisition, and has twice been sent to a lunatic asylum, from which, however, his relative clearness of intellect, and still more, perhaps, his perversity of conduct, have speedily secured his discharge. When at large he devotes himself to playing malevolent practical jokes on the asylum and prison officials and on others who have had to do with him, or pesters them with abusive and obscene post-cards, or makes fantastic "revelations" of their misconduct to the Press.

The author regards the case as one of *folie morale*, involving legal irresponsibility, and founds on its history a plea for institutions of the prison asylum type, in which criminal imbeciles of the sort may be detained on indeterminate sentence.
W. C. SULLIVAN.

Bacteriological Researches on the Dust in Music-halls [Ricerche batteriologiche sul pulviscolo delle feste da ballo.] (Ann. di Freniat. vol. xiii, fasc. 4, Dec. 1903.) Tirelli and Ferrari-Lelli.

The observations recorded in this paper have an interest in connection with asylum hygiene, more particularly in regard of the transmission of phthisis. They are to be followed by a series of similar observations on the dust in asylum wards.

The dust for culture was collected by means of a Miquel's filter, that for animal inoculation in a Strauss and Wultz apparatus. The observations were carried out in a number of music-halls and theatres, some urban and some rural, differing in the social position of their clients, in the system of flooring, lighting and furnishing, in the methods of cleaning and in other respects.

The dust was not taken from surfaces, but was collected from the air so as to represent accurately the conditions under which micro-organisms are liable to be inhaled in such rooms. Doubtless for this reason the number of colonies found on plate culture was in nearly all cases much below that noted in published researches of the same nature.

The results, set out in detail in a series of tables, went to show

that the thoroughness with which the room was cleaned and the social position of the frequenters were the factors of most importance, entirely masking, for instance, the influence of the mode of flooring, and that of the situation, urban or rural.

The pathogenic organisms found were few and relatively unimportant, being limited to the pathogenic cocci and Fraenkel's diplococcus of very attenuated virulence. In no instance, whether by inoculation or otherwise, could the presence of the tubercle bacillus be detected. This negative result, taken in connection with similar findings by other observers, lead the authors to suggest that current ideas as to the diffusion of this organism may be somewhat exaggerated.

W. C. SULLIVAN.

7. Asylum Reports for 1903.

Some English County and Borough Asylums.

Derby Borough.—A new detached villa block for private patients has been opened, and has given relief to the main asylum. Dr. Macphail is forced, by the consideration of increased first admissions, to the conclusion that there is in the borough an appreciable increase of mental disease requiring asylum treatment. He also states :

It is worthy of remark that in this asylum the average period of residence of patients who recover is gradually increasing. This has also been the experience of other medical superintendents, and the only explanation seems to be that an appreciable change is gradually taking place in the type of cases of mental disease. Not only are the mental symptoms more severe and prolonged, but the general vitality of the patients is lower.

The "Brabazon morning" is now a regular institution, and is looked forward to by the patients as the event of the week.

Hereford County and City.—A new system of electric lighting has been installed, but it has been found that the work was done in such a way that the insurance company raised objection to certain parts of it, with the result that the issues between the Committee and the contractor have been referred to arbitration.

The new works and an epidemic of scarlet fever have led to an increase of 2s. 10d. in weekly cost per head. This increase Dr. Morrison accounts for satisfactorily. It is an object lesson, apparently, in the results of doing the right thing at a wrong time.

Lancashire, Prestwich.—The population of this huge asylum creeps on, and at the end of last year it was within one of 2700. Of the 849 admissions chronic and senile insanity claimed only 81 cases, the others being mostly in an active condition, and all requiring more than average care.

We consider that Dr. Perceval is near the mark when he writes :

In connection with the deaths due to phthisis, the question of isolation hospitals immediately occurs to one. We have such a building, of small dimensions, upon

the male side, and this has been very successful ; but for the females we have merely a portion of a ward available for this purpose. It will be advisable to erect one, similar in size to that on the male side, at the earliest opportunity. These small hospitals are of a protective character—they afford accommodation for those cases most dangerous to the other inmates. For the wider and better treatment of tuberculosis amongst the patients a much larger scheme would be necessary, in fact, a miniature asylum. There are difficulties in connection with such buildings for the insane, about which much difference of opinion exists, and of course it would involve a large expenditure. It seems to me, however, that there is little worthy of consideration between these two plans, viz. the small isolation hospital, chiefly protective, and the large one with complete accommodation for all forms of insanity.

City of London.—Dr. White has laid himself out to get as many patients as he can whose expenses, moderate as they are, do not come on the rates. He is able to show that out of 563 patients in the asylum on last December 31st, no less than 214 come within the category of “private.” There can be no doubt as to the benefits that arise from this, a principal one being that it removes from the patient and from the patient’s friends the loss of self-respect which arises from the application—frequently inappropriate—of the odious term “pauper.” It is now recognised that on the occurrence of zymotic disease the best policy for the sanitary authorities is to urge the poorest to come into their hospitals and to make the way easy by withholding the name pauper, and by removing all disabilities that otherwise attach to the receipt of relief. We should contend for the same treatment of the insane, so that all sources of opprobrium and all disabilities are removed. In either case the interests of the patient are equalled in importance by the interests of the public at large. Dr. White, on the visit of the Association to Stone by his hospitable invitation, was able to point to and show a long array of new works and enterprises which have served to bring the asylum up to date, and to give its scheme of administration an appearance of rounding off and completion, and we take this opportunity of congratulating him on this. It is a source of satisfaction also that the City Fathers have not been unmindful of the increased anxiety entailed by the successful administration of the more complicated machine.

Monmouthshire.—The Committee have increased their area by the purchase of eighty-two acres of farm land. Two cottages thereon were converted to the use of fourteen male patients, at a cost of £180. The accommodation is said to be suitable both as to safety and comfort. The thought arises why, if an expenditure of about £13 per bed on cottages which originally could have cost but little can procure good and suitable accommodation, should committees need to erect farm “villas,” etc., at prices nearly approaching those of the main asylum?

The supply of a ping-pong table in a female ward is commended by the Commissioners.

Two recoveries after eleven and thirteen years residence are noteworthy.

Sussex, East.—The present report is the last one issued by the county of East Sussex, the asylum having passed at Michaelmas into the sole

possession of the Borough of Brighton. While the year began with 983 patients, it finished up with only 570. We believe that the asylum, which was opened in 1859, was built originally for 450 patients, and was intended to serve East and West Sussex and Brighton. Within a little more than forty years accommodation has been provided for 1100 at Hellingly and 800 at Chichester, which, added to the 900 beds at Hayward's Heath, makes house-room for 2800.

Wilts County.—Dr. Bowes, in adverting to an abnormally low recovery rate, writes :

Unless more acute, favourable, and curable cases are received there is little prospect of this rate improving, and unless very complete and probable permanent recovery be accomplished a low recovery-rate may be a blessing in disguise. Grave responsibility, for many reasons, attends the discharge of patients from asylums. The more this is recognised the better for the public in general and future generations in particular, and the more hope there will be of lessening insanity.

In the Commissioners' report we find :

There is no check-locking to any of the doors, but the lock is protected by a glass covering, while the medical superintendent alone has a small key which opens the case without requiring damage to the glass, and enables him to test the locks from time to time. This plan, which we believe is the invention of Dr. Bowes, has been adopted in all similar doors.

Some Registered Hospitals.

Barnwood House.—Dr. Soutar regrets that we cannot claim that any form of mental disorder within recent years has been transferred from the incurable to the curable class. Our recoveries occur amongst patients of the same type as furnished them twenty years ago.

On the admissions in 1903, excluding transfers, the recoveries amounted to 70 per cent. Of this highly satisfactory number of recoveries 84 per cent. were mentally ill less than one month prior to reception.

These figures point very emphatically to the value of early treatment, and should, I think, lead us to resist any alteration in the law which would permit, in those precious early days, of treatment less efficient than that which can now be obtained in the asylums and hospitals throughout the country. In the attempt to avert the catastrophe of chronic insanity these cases demand from the outset the watchfulness of experienced physicians, and active treatment directed to their ever-varying requirements, and it has not been shown that in the country vicarage, the house of the retired attendant, or in that of the more or less busy general practitioner the conditions are more favourable for these difficult cases of acute mental disorder than those which prevail in our well-staffed and well-equipped asylums. On the contrary, the state of many patients who at present come to us from single care suggests that, however well suited that system may be for the *care* of some chronic cases, it largely fails, as might be expected, to afford efficient *treatment* for acute cases of mental disorder.

That is one view about the question of the treatment of incipient and non-confirmed mental disease, and it is very well put, but we imagine that evidence from Scotland would be forthcoming to show that as much can be said on the other side.

Bethlehem Royal Hospital.—The ætiology of the admissions into this institution is always interesting, since the bulk of the cases are so recent that something more accurate in the shape of history can be got than is usually available in places where chronic as well as acute insanity is taken in. Great and persistent care in making inquiries is evidenced by the fact that in only 5 *per cent.* of the cases could no cause be assigned. In 187 admissions hereditary influence was found in no less than 102, a percentage of 54·5. Previous attacks had occurred in 34·7 *per cent.* The corresponding percentages in the Commissioners' quinquennial averages in the last report for private patients were 21·9 in respect of hereditary influence, and 19·0 for previous attacks. So, too, the assignment of venereal disease in 5·3 *per cent.* is considerably above the Commissioners' 3·4 percentage. On the other hand, 3·7 *per cent.* of alcoholic causation at Bethlehem comes much below the 13·8 in the other tables. Yet one more contrast. Bethlehem found fevers as a cause in 4·8 *per cent.* as against 1·1 *per cent.*

Warneford Asylum.—Of the 31 admissions no less than 25 were in an acute stage—16 of mania, 9 of melancholia. Of five of the former who suffered from the formidable variety of acute delirious mania, four recovered, while the fifth was convalescing. So much active insanity in a moderate sized institution must press hard on the staff, which has to be kept within quite restricted dimensions on account of the relatively small income. The recovery rate of 63 *per cent.* speaks well for the administration, while the fact that more than half the patients paid less than their cost (in many cases less than one third) is evidence that the institution is doing the duty laid down for it by benevolent founders. Many of the Association, through the kindness of Dr. Neil, had an opportunity at a pleasant general meeting in February of personally seeing how comfortable patients can be made at moderate cost. The expression "homely and comfortable" seemed to be particularly applicable to the arrangements of the institution.

Some Scottish District Asylums.

Aberdeen.—Writing at the commencement of 1903 Dr. Reid makes a noteworthy statement. In spite of tuberculosis being a special scourge of Scottish asylums, and in spite of much overcrowding and many sanitary shortcomings in the old asylum the death-rate from phthisis is a very low one, being confined to those who entered with the disease established. In fact, at the time of his writing there was not a single case of active tuberculosis in the asylum.

This, in my opinion, must be attributed to the limited size of the dayrooms, and the preponderance of single bedrooms; to the bedrooms being heated by short independent sections of hot water at high pressure; and lastly and most of all to the large amount of exercise in the open air which the patients enjoy. In nearly all cases they are out from seven in the morning till sunset in winter, and till eight o'clock in summer, and this in all weathers. This is rendered possible by our much decried "airing courts" with their verandahs which, with all their manifest disadvantages, supplement the regular hours of exercise in the general

grounds very usefully, and allow a greater number of the patients to spend the day in the open air than would otherwise be possible without a large increase of the staff.

The plan of nursing male wards by females has been introduced, and we note that in the admission ward four nurses are aided by experienced male attendants, while in two other wards reliable male attendants are near at hand if wanted. Three patients who had formerly been in the asylum applied at the door for readmission, fearing self-injury from lessening self-control.

Ayr.—This is the first report from Dr. Easterbrook, who has taken the place of Dr. C. Skae as Medical Superintendent. The report goes into much detail in regard to the nature and causes of the admissions and deaths of the year, and it is very evident that Dr. Easterbrook takes a serious and commendable view of the opportunities afforded by an annual report for enlightening the population of the district. One of his first cares has been to persuade his committee to erect a hospital. This will be on the lines adopted so much in Scotland, viz. the combination of a reception home and mental hospital and infirmary for all the sick and feeble in the asylum. He also proposes to find accommodation for the segregation in annexes. He has worked out the cost per bed up to the present for the whole asylum, starting with the original contracts in 1869, and finds that it comes to £288.

Dr. Easterbrook has worked out an original and highly detailed scheme of statistics which departs from the present tables entirely. There are points in the scheme which are excellent, while there are others which raise doubts. But in view of the impending report of the Statistical Committee we do not propose to review his work now.

Crichton Royal Institution.—The reception portion of the new hospital for pauper patients has been completed, and when the infirmary has been added the whole will form a hospital on the lines generally accepted in Scotland, an institution to contain all cases specially needing medical supervision whether for mental or bodily diseased conditions. The sanatorium for consumptives (for twenty-six patients in two wards) has also been occupied.

Gartnavel Royal Asylum.—Dr. Oswald writes some weighty words in his report on the prevention of insanity by regulating the education of the individual. He thinks, as many do, that the routine form of education now practised is more calculated to cause insanity in nervous children than to protect them from it. The teacher should be informed of hereditary predisposition, of former illnesses, etc., so as to be able to regulate pressure. Dr. Oswald refers to the surprise often felt to patient's parents when a breakdown occurs in adolescence after a bright and clever career at School. The very brightness of intellect frequently leads to overstimulation, which should be withheld on notice of hereditary instability. Two cases of well-marked general paralysis were discharged improved, and have remained well for nearly a year. A lady died after a residence of sixty-two years at a weekly charge of eight shillings.

Dr. Oswald is trying the system of treating acute cases in bed in the open air in all weathers, under the protection of a verandah. Some cases have improved, and further trial is to be given.

The Directors desire it to be known to the medical profession that they are willing, through their physician superintendent, to favourably consider the admission for a limited period, at rates under the lowest fixed amount of £40 per annum, of cases of acute and recent mental illness occurring among a class who, while unable to pay a remunerative rate, are yet unwilling to have their friends sent to a rate-supported asylum for treatment.

Govan District.—Though it seems but the other day that Hawkhead was the latest asylum opened, it is now so nearly full that the District Board have to consider the provision of further accommodation. This state of things occurs, too, in spite of a consistently high recovery-rate (over 45 *per cent.* for the last four years) and a death-rate above the normal. Considering the nature of the area from which the patients are drawn the presence of general paralysis in less than 5 *per cent.* of the admissions is a light ratio, while less than 15 *per cent.* were due to alcohol.

Inverness District.—Dr. Keay still strenuously pushes the discharge of patients on probation with a view to their being ultimately boarded out. Of seventy-six thus treated, nine were returned to the asylum, two died, and fifty-eight have already been discharged. More than half of the patients who died were found on autopsy to be affected with tuberculosis. He has been able to follow infection by such cases into the staff itself. The committee have been fortunate enough to secure a neighbouring property of 200 acres of good arable land, with commodious farm house and ten cottages. Dr. Keay will be able to adapt the house and appurtenances for seventy to eighty patients.

Some Irish District Asylums.

Ballinasloe.—In the unfortunate absence of Dr. Fletcher from illness, which to our great regret has terminated fatally, the last annual report of this asylum was made by Dr. Mills, who, as senior assistant medical officer of many years' standing, acted as deputy superintendent. It is matter of history now what has been the reward of his long, faithful, and capable services. We can but offer him our sympathy. Certainly if the Committee's procedure in this instance became common a deadly blow would be struck at the medical administration of the most important of all the public institutions which require supervision by medical men.

Dr. Mills points out a striking fact. At the time of the report 226 of the 1234 patients were over sixty years of age. Ten years ago of 791 patients only 45 were above sixty years. In other words, while the residence has increased by 56 *per cent.*, the patients over sixty have increased by 402 *per cent.* The reasons he assigns are the drain of young people going to America, and the intolerance in the family circle of members mentally unsound.

The Inspector, Dr. Mazière Courtenay, reports in regard to the new hospital which has come into use :

The effect produced on the mental condition of the patients by the improved accommodation and surrounding is most striking. Peace and quietude, contentment and good conduct prevailed throughout, and if proof were required these buildings show the marked influence which such accommodation has on the insane.

Intemperance as a cause was only assigned in 14 out of 240, but comparison with parallel figures in England is not possible, because the system of returning causes in Ireland permits only of one cause being given, which is probably the prominent one. But, of course, any given cause might occur as an adjuvant, though not recorded.

Belfast.—In relation to a depressed recovery ratio Dr. Graham writes :

The recovery rate calculated on the admissions was 27·7 *per cent.*, as compared with 25·3 the preceding year. Here we seem to be stationary, or at least making poor headway. Can we put our finger on the cause of this depressing state of affairs ? I unhesitatingly reply that the chief cause of the mischief is to be found in the reluctance of patients to seek medical advice at the very beginning of the malady, and the hesitancy of the relatives, even when the disorder is developed, to send their friends to an asylum.

A "villa" has been instituted here with good effect. It is just an ordinary house which has been made capable of receiving thirty patients.

It has been before noted that the old asylum is getting far too small for the patients of Antrim County and Belfast City. As long ago as 1892 authority was obtained for separation, leaving the old asylum to the city. An estate was bought and plans made, but these have had a stormy career, being prepared and submitted to one authority, then re-prepared and submitted to another. At last Dr. Graham persuaded his Committee to adopt the villa colony type of asylum. This is actually in course of erection. At present the main asylum, which has standard accommodation for 440 patients, actually contains 741. Planners differ, patients suffer.

The City of Belfast have been thoughtful enough to plant some small-pox huts within 285 yards of the asylum portion of the Purdysburn estate !

Only 14 out of over 450 males refuse to work, while none of the females are thus obstinate. The success in getting such a large proportion to employ themselves usefully reflects much credit on the spirit in which the institution is managed.

Enniscorthy.—Dr. Drapes writes very strongly, but not too strongly, on the alcoholic question. The following extract from his report will show what are his probable views on the licensing question :

Drinking habits are regarded with far too great leniency by the public generally, treated as a "weakness," a harmless indulgence, to be condoned, winked at, even directly encouraged by a large section of the community, and as far as the law is concerned, as regards any deterrent effect it may have on habitual drunkards, it is a miserable failure. Those magistrates who deem it consistent with their official position to encourage and sanction the planting of public-houses broadcast over

the country, so multiplying foci of temptation, and nurseries of insanity, seem blind to their responsibilities as citizens, and the real obligations of their office, which should be to restrict and, if possible, eradicate all injurious influences on the body politic, to adopt measures which shall curb and restrain, not encourage, licence and inordinate indulgence, and as far as in them lies to raise the moral and physical tone of the population. Were public houses, instead of being increased, reduced to a minimum a great benefit would be conferred on those unfortunate who have drinking proclivities and feeble wills, and also on ratepayers themselves, who, whatever mistakes those in authority may commit, have in the end always to "pay the piper." Let the facilities for drink be confined within their narrowest limits, and at least one potent cause of insanity is lessened; multiply them indefinitely and our asylums will get filled to overflowing.

There is yet another extract from his report which must meet with unqualified approval.

It is difficult to bring home to some minds, particularly those of very economical views, that the work of an asylum attendant is on quite a different level, and very far removed from the work of an ordinary labourer, and that a labourer's wage ought not to be ample recompense for those who have to perform the arduous, difficult, and delicate duties in connection with the care and management of the insane. A little reflection ought to convince such persons that this view is a very erroneous one. The work of an ordinary labourer is generally classed as unskilled, in contradistinction to that of an artisan, for instance, which requires a more or less protracted period of teaching, training, and experience before a man is qualified to undertake a work of the kind usually known as "skilled labour." Surely an attendant on the insane ought to stand on at least the same level, certainly on no lower level, than that of an ordinary artisan. No one can be an efficient asylum attendant until after extended training and experience.

There is no entry of general paralysis among either admission, deaths, or remainder.

Limerick.—Dr. O'Neill has a happier experience than Dr. Graham at Belfast in the promptitude with which patients are sent into the asylum. Fifty-two *per cent.* of his admissions came in within three months, and another 26 *per cent.* within twelve months.

During the past fourteen years I have repeatedly drawn attention to the change in the form of insanity of the admissions. Formerly the greater number suffered from mania, now the majority suffer from melancholia. Of the admissions for last year 73, or 46 *per cent.*, were suffering from this form of insanity. The physical condition of a large number of the admissions was very unfavourable, many of them being in a broken down and exhausted state.

Here, too, persistent efforts are made to get the patients to work, and the benefit to them is backed up by appreciable saving in expenses.

In an asylum with a skilled and efficient staff of tradesmen-attendants all the works in connection with the institution should be executed by house labour, and this asylum may be taken as a fair example. The entire work of the institution, including all branches of industry—masonry, carpentry, painting, engineering, baking, tailoring, shoemaking, upholstering, smithwork, and, recently, weaving—is executed by the staff, assisted by the patients. Every article of patients' clothing, male and female, as well as that of the attendants' uniforms, is made in the house. The weaving, which was started in January, 1903, has proved most satisfactory; nearly 1300 yards of strong, serviceable tweed for the men's coats and waistcoats have been made. For some months past we have been making a first-rate serge for the women's dresses. It is gratifying to know that apart from the intention which led to the introduction of weaving, namely, "employment," that we can produce sufficient tweed and serge for our requirements at a considerable saving.

This asylum is quite free from general paralysis.

Part IV.—Notes and News.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

The Quarterly Meeting was held at the Langham Hotel, Portland Place, on Wednesday, May 18th, 1904. Dr. Ernest W. White, the President, occupied the chair.

The following members were present:—Drs. F. W. Edridge-Green, E. D. Macnamara, Albert Wilson, Robert Baker, David Bower, L. A. Weatherly, Harry A. Benham, R. S. Stewart, J. Carlyle Johnstone, C. Easterbrook, Frank Ashby Elkins, Robert Jones, Evan Powell, W. R. Dawson, R. C. Stewart, W. D. Moore, Richard Legge, F. Hudson Evans, A. B. Kingsford, E. S. Pasmore, H. Corner, G. Stanley Elliot, E. B. Whitcombe, J. B. Spence, G. E. Mould, W. Handfield Haslett, A. N. Boycott, H. Wolseley Lewis, C. Hubert Bond, James Stewart (Clifton), G. E. Shuttleworth, T. Seymour Tuke, A. R. Urquhart, Crochley Clapham, C. S. Morrison, S. R. Macphail, James Neil, G. H. Savage, James Chambers, R. Percy Smith, A. J. Alliot, R. H. Cole, Herbert Smalley, R. N. Paton, G. F. Blandford.

Apologies for non-attendance were received from Drs. A. P. Russell, F. R. P. Taylor, D. G. Thomson.

Visitors.—Drs. O. Theobalds and T. Wilson Parry.

The Educational and Parliamentary Committees met in the morning.

The following were present at the Council meeting, which was held before the quarterly meeting:—Drs. Ernest W. White (President), Arthur N. Boycott, George Braine-Hartnell, Lewis C. Bruce, Maurice Craig, William R. Dawson, Robert Jones, Harold A. Kidd, Richard J. Legge, H. Wolseley Lewis, Henry C. MacBryan, P. W. Macdonald, Charles A. Mercier, Alfred Miller, H. Hayes Newington, Bedford Pierce, R. Percy Smith, J. Beveridge Spence, Rothsay C. Stewart, Alex. R. Urquhart, Edmund B. Whitcombe, David Yellowlees.

The Council accepted with thanks the kind offer of the retiring President, Dr. Ernest W. White, to present a badge for the President in office.

Apologies for non-attendance were received from Drs. F. R. P. Taylor and H. Rayner.

The minutes of the last meeting were confirmed.

The following were elected ordinary members:—Robert Welsh Branthwaite, William Thomas Crawford, John Edwin Eddison, Wilfred Louis Remi Fleming, Daniel Gillespie, G. H. Harper-Smith, Herbert Edward Izard, John Percy Race, and Peter Campbell Smith.

COMMUNICATIONS.

Dr. Albert Wilson read the report of the Committee of the Medico-Psychological Association appointed to consider the case of Double Consciousness (see p. 500).

The PRESIDENT said that he was sure it was the wish of the meeting to thank the Committee, which had worked so ably, for the report they had presented, and he would ask Dr. Mercier to move the adoption of it.

Dr. MERCIER said he moved with very great pleasure the adoption of the report, which had involved an enormous amount of labour on the part of Dr. Albert Wilson. It referred to one of the most extraordinary cases which had ever come within his experience. After such a case as that now reported on, one was led to ask "Who are we?" for in that case there appeared to be eight or ten personalities under one name. It raised anew the question of criminal responsibility, for in certain states that girl was vicious, and had propensities which, if not actually criminal, might easily have become so. Supposing she committed a criminal act in one state and then changed to another personality, in which she

was tried, the person tried would not be the person who committed the crime, and it would clearly be most unjust on any principle of equity to punish one person for the doings of another. The whole case was one of the most remarkable ever recorded, and he thought the Committee were not asking too much in proposing that, long as it was, it should be published in full in the columns of the *JOURNAL*. He therefore proposed that the report of the Committee be received and adopted, the adoption involving the carrying out of the recommendation in the last clause, that it be published in full in the *JOURNAL*.

Dr. JAMES STEWART (Clifton) said if it were necessary for that motion to be seconded he would gladly do so.

It was then put and carried unanimously.

Dr. BRUCE read a paper, entitled "Quantitative and Qualitative Leucocyte Observations in Various Forms of Insanity" (see p. 409).

Dr. SULLIVAN read a paper entitled, "A Statistical Note on the Social Causes of Alcoholism" (see p. 417).

Dr. KENNEDY WILL contributed "Notes of a Case of Combined Spinal Degeneration, with Unusual Mental Symptoms." Microscopical sections of the spinal cord were shown. (This paper will appear in a future number of the *JOURNAL*.)

The members dined together in the evening at the Café Monico.

SOUTH-EASTERN DIVISION.

The Spring Meeting of the South-Eastern Division was held, by the courtesy of Dr. Hunter, at the West Ham Borough Asylum, on Friday, April 29th, 1904.

Among those present were Drs. Ernest White (President), Mott, Hunter, Bower, Gayton, Shuttleworth, T. O. Wood, R. J. Stilwell, Ewan, Haynes, W. R. Hanbury, Kingsford, Pasmore, Lavers, Donaldson, Daniel, A. S. Newington, Chambers, Watson, Shera, D. G. Thomson, Goldschmidt, Edridge-Green, Hyslop, Hudson-Evans, J. W. Evans, and Boycott (Hon. Sec.).

The asylum and grounds were inspected, and after luncheon a meeting of the Divisional Committee was held.

The General Meeting of the Division was held in the afternoon, Dr. Ernest White (President) in the chair.

The minutes of the last meeting were taken as read and confirmed.

An invitation from Dr. Chambers to hold the Autumn Meeting of the Division at The Priory, Roehampton, on Thursday, October 6th, 1904, was unanimously accepted with much pleasure.

It was decided that the date of the next Spring Meeting should be Thursday, April 27th, 1905.

The following members were elected by voting papers to hold office for 1904-5.

Hon. Sec. to the S.E. Division.—A. Norman Boycott, M.D.

Four Representatives on the Council.—David Bower, M.D., D. G. Thomson, M.D., T. Outterson Wood, M.D., H. Wolseley Lewis, M.D.

The following gentlemen were elected ordinary members of the Association:—Ernest Harrison Griffin, B.A.(Cantab.), L.S.A.(Lond.), Assistant Medical Officer, Camberwell House, proposed by Drs. F. H. Edwards, Boycott, and Grimmond Smith; Henry Christian Ernest Quin, L.R.C.P., L.R.C.S.(Edin.), L.F.P.S.(Glas.), Assistant Medical Officer, Camberwell House, proposed by Drs. F. H. Edwards, Boycott, and Grimmond Smith; Robert George Hetherington Tate, M.D., D.P.H., Assistant Medical Officer, Banstead Asylum, proposed by Drs. H. W. Lewis, J. J. Murphy, and P. G. Kennedy; Harold Rowe Jeremy, M.R.C.S.(Eng.), L.R.C.P.(Lond.), Assistant Medical Officer, Borough Asylum, Canterbury; proposed by Drs. Norman Lavers, Boycott, and Grimmond Smith; Oliver Ferreira Naylor Treadwell, M.R.C.S.(Eng.), L.S.A., Medical Officer, H. M. Convict Prison, Parkhurst, Isle of Wight, proposed by Drs. Smalley, Scott, and Paton.

Drs. Hunter, Rawes, and Lord were elected as members of the South-Eastern

Divisional Committee of Management, which now consists of the following members :

<i>Retire in 1905.</i>	<i>Retire in 1906.</i>	<i>Retire in 1907.</i>
Dr. Amsden.	Dr. J. Bayley.	Dr. Hunter.
Dr. F. H. Edwards.	Dr. Harding.	Dr. Rawes.
Dr. Wolseley Lewis.	Dr. R. Stillwell.	Dr. Lord.

Dr. D. G. THOMSON read a paper entitled "A Few Remarks on the Registration of Nurses and the Nurses' Registration Bill from the Mental Nursing Point of View" (see page 451), and after the discussion on this,

Dr. MOTT, F.R.S., gave a lantern demonstration on "The Significance of the Convolutional Pattern of the Human Brain."

Votes of thanks were passed to Drs. Thomson and Mott for their communications, and to Dr. Hunter and the Visiting Committee of the West Ham Asylum for having so kindly received the Division.

SOUTH-WESTERN DIVISION.

A meeting of the South-Western Division was held at Broadmoor Asylum on Tuesday, April 26th.

Dr. Brayn was voted to the chair, and there was a numerous attendance of members and visitors.

The minutes of last meeting were read and confirmed, and two candidates, Ernest John Manning, M.R.C.S., L.R.C.P., Assistant Medical Officer, Broadmoor, and W. Sim Garden, M.B., B.Ch., Assistant Medical Officer, Cotford, were elected members of the Association.

Dr. Macdonald was elected Hon. Sec., and Dr. Braine-Hartnell and Dr. MacBryan were elected representative members of Council.

Dr. Brayn and Dr. Soutar were elected members of the Committee of Management.

Friday, October 28th, was agreed upon as the date of the Autumn Meeting, and the members accepted Dr. Weatherly's invitation to meet at Bailbrook House.

Tuesday, April 11th, was named as the date of the Spring Meeting, 1905.

The Hon. Sec. made a short statement regarding the report of the Committee on Divisional Expenses.

Dr. Baker read a paper on "General Paralysis and Crime" (see page 437).

Owing to the large amount of business to be got through, and the prolonged and interesting discussion on Dr. Baker's paper, it was agreed to postpone Dr. Cotton's paper to the Autumn Meeting.

Dr. Brayn was accorded a hearty vote of thanks for presiding and for his hospitality.

NORTHERN AND MIDLAND DIVISION.

A meeting of the Northern and Midland Division of the Medico-Psychological Association was held at Scalebor Park, Burley-in-Wharfedale, on April 7th, 1904, Dr. Gilmour presiding.

The following members were present:—Drs. Adair, Donelan, Eurich, Geddes, Groves, Johnstone, Kay, Legge, May, Middlemass, G. Mould, Merson, Macphail, Mackenzie, J. G. Macdonnell, Nixon, Pierce, Pope, Rambaut, Rutherford, Stewart, Maule Smith, and Trevelyan.

Visitors: Drs. Eddison, Archdale, Josephine Brown.

The following were elected ordinary members:—Percy Douglas Hunter, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer and Pathologist, Durham County Asylum (proposed by Drs. Skeen, Geddes, Pierce); George Francis May, M.D., C.McGill, L.S.A., Assistant Medical Officer, Durham County Asylum (proposed by Drs. Skeen, Geddes, Pierce); Alan Rigden, M.R.C.S., L.R.C.P.Lond.,

M.P.C., Assistant Medical Officer, Salop and Montgomery County Asylum (proposed by Drs. Rambaut, Miller, Pierce); Augustine Francis O'Downey, L.R.C.P., L.R.C.S.Edin., Assistant Medical Officer, Salop and Montgomery County Asylum (proposed by Drs. Rambaut, Miller, Pierce); Geoffrey Plumpton Wilson, M.R.C.S., L.R.C.P.Lond., Assistant Medical Officer, Kesteven County Asylum, Sleaford (proposed by Drs. Ewan, Green, Pierce); Mervyn Alex. Archdale, M.B., B.S.Dur., Assistant Medical Officer, East Riding Asylum, Beverley (proposed by Drs. John Merson, John S. Anderson, B. Pierce); Josephine Brown, M.B.Lond., Assistant Medical Officer, Bracebridge Asylum, Lincoln (proposed by Drs. Torney, Adèle de Steiger, Norah Kemp).

Dr. Bedford Pierce was unanimously re-elected Secretary of the Division.

Drs. Richard J. Legge and Chas. K. Hitchcock were unanimously elected representative members of Council.

CONTRIBUTIONS.

Dr. MAULE SMITH (Wakefield) gave an interesting demonstration of pathological specimens.

Dr. GILMOUR read a paper "On the Value of Saline Injections in Certain Acute Cases of Mental Disease." After using saline solutions of various strengths and composition he now recommends the use of a '75 per cent. solution of common salt. After the rectum has been cleared out by the ordinary methods he injects *per rectum* from ten to fifteen ounces of this solution three or four times daily at a temperature of 98°—105° F. In many cases the injections are immediately followed by improvement—the pulse-rate falls and the tension increases. The mental symptoms quieten, and sleep frequently results. The tongue cleans, and appetite is improved. As the excess of fluid is generally excreted by the kidneys the bladder may require attention. The injections are rarely returned. These injections are most serviceable in acute delirious cases with agitation and restlessness. He has not observed any bad effects. Dr. Gilmour briefly recounted some illustrative cases.

Dr. POPE welcomed Dr. Gilmour's treatment by saline injections as an alternative to the dire necessity of forced alimentation at this stage, with its dangers and difficulties in cases of acute delirious mania. He would, however, draw attention to the occasional sapræmic condition produced by absorption from the bowel, and agreed with Dr. Gilmour that the rectum should be carefully emptied and cleansed as a preliminary.

Dr. RUTHERFORD MACPHAIL, in complimenting Dr. Gilmour on his interesting and practical paper, emphasised the value of short clinical communications of this nature. The West Riding asylums had in the past taken a lead in furnishing pathological reports of cases of mental disease and doing original work. Pathology to be of any real value implied expert knowledge such as only a few of our members possessed, but accurate clinical observation, in his opinion of greater importance, had been too much neglected in the past, and asylum physicians could each and all make interesting communications of this nature to our branch meetings. He hoped that this was the first of many clinical papers from the medical staff of Scalebor Park. The value of Dr. Gilmour's remarks would have been enhanced had they been accompanied by observations on the blood-pressure in the patients before and after the saline injections.

Dr. MAULE SMITH (Wakefield) thought that Dr. Gilmour's paper had an important bearing on the treatment of insanity due to toxic conditions. The absorption of large quantities of normal saline would have the mechanical effect of washing out toxins accumulated among the brain-cells, thus removing irritation and inducing sleep. He asked whether any difference was noted in the recovery rate of people who had a strong predisposition to insanity and those in whom the insanity was due apparently entirely to toxic influence.

Dr. EDDISON (Leeds) expressed his thanks to the Society for being allowed to be present at the meeting. He thought Dr. Gilmour's remarks extremely interesting. He believed that the advantage derived was produced exactly in the same way as in the case of patients suffering from febrile conditions in whom restlessness and excitement is lessened by allowing plenty of fluid. The waste by sweat in febrile cases is too much underrated, and it ought not to be forgotten

that all such cases are losing a great amount although the skin is hot and dry. He asked Dr. Gilmour whether he had found simple water injections were not just as useful as saline ones, and asked, further, whether Dr. Gilmour meant that rectal injections had any advantage compared to water taken by the mouth, supposing the patient willing to swallow. He had often thought that a good deal of the apparent advantage derived from injections of fluids in febrile and other cases was due merely to the absorption of water and consequent relief to the whole system, and particularly the nervous system, by the much needed water.

Dr. EURICH (Bradford) asked whether Dr. Gilmour had used saline solutions of other composition than "normal saline," e.g. Karlsbad or Kissingen waters, which could be injected for a longer period without causing irritation.

Dr. TREVELYAN, of Leeds, also took part in the discussion, and Dr. GILMOUR replied.

Dr. MIDDLEMASS opened a discussion upon "Traumatism and General Paralysis" (see page 433).

Dr. BEDFORD PIERCE gave a brief account of his impressions on visiting the asylum at Heidelberg, and also gave some details of Dr. Kraepelin's clinical methods. These remarks were supplemented by Dr. Eurich.

The meeting closed with a hearty vote of thanks to Dr. Gilmour for presiding, and for his hospitality to the members.

SCOTTISH DIVISION.

A meeting of the Scottish Division of the Medico-Psychological Association was held by invitation of the Corporation of Glasgow at Girgenti Inebriates' Home, Montgreenan, on Friday, March 25th, 1904.

The following members were present:—Drs. Angus, Baugh, Carlyle Johnstone, Carswell, Clouston, Easterbrook, Ford Robertson, Hotchkis, Ireland, Kerr, Macnaughton, Marr, Parker, G. M. Robertson, Rutherford (senior), Sir John Sibbald, Turnbull, Urquhart, Yellowlees, and Bruce, Divisional Secretary.

There were also present:—Ex-Bailies D. M. Stevenson, James Steele, John Battersby, Councillors J. P. Maclay, John Dallas, William Nicol, Kennedy, and Burgess, Dr. Cunningham, Mr. A. Walker, Mr. James R. Motion, Dr. Devon and Provost Wilson.

Dr. CLOUSTON was called to the chair.

The following were elected ordinary members:—James Hinshilwood, M.D., Surgeon to Glasgow Eye Infirmary (proposed by Drs. Carswell, Oswald, and Parker); James Devon, L.R.C.P., L.F.P.S., Prison Surgeon, Glasgow (proposed by Drs. Carswell, Oswald and Parker); Angus John Grant, M.D., B.Sc., L.R.C.P.E., of Ennerdale, Haddington (proposed by Drs. Bruce, Ronaldson, Clouston, and Macpherson).

The minutes of the last meeting having been printed in the *Journal of Mental Science* were taken as read.

The Divisional Secretary read the report of the Retiring Allowances Committee, which was as follows:

"The Retiring Allowances Committee beg to report that all the Members of Parliament for Scotland have been approached upon the subject of retiring allowances for workers in Scottish Parochial and District Asylums. Out of the 72 Members so approached 44 replied; 24 of these promised support, 18 expressed sympathy, and 2 were doubtful. The Secretary for Scotland was unable to receive a deputation owing to pressure of business.

"The Committee do not think this an opportune moment to propose that a Bill should be introduced into Parliament. They therefore ask for further instructions from the Division, and they suggest that in the event of a General Election taking place every Scottish candidate should be personally approached."

Dr. URQUHART moved and Dr. MARR seconded that the report be received and adopted in the minutes, and this was unanimously agreed to.

Dr. CLOUSTON moved that the Committee be reappointed to watch the interests of Scottish asylum workers and servants with regard to the question of retiring

allowances and to take such steps as they might consider proper and expedient to attain the object in view. Dr. KERR seconded. On being put to the meeting the motion was unanimously adopted.

The Divisional Secretary read the report by the Committee appointed to consider the Divisional Expenses, which was as follows:—

"The Committee have carefully considered the various matters referred to them and are of opinion that a considerable amount of economy can be practised, especially in the direction of reporting expenses. They suggest—

"1. That the report of the business part of the meeting be reduced to simple headings, that the engaging of a professional reporter be left to the Secretary of the Division should he consider his services absolutely necessary, and that a fee not exceeding £2 2s. be allowed.

"2. That the Secretaries be empowered to ask those who speak to a discussion to put the gist of their observations in writing.

"3. That the members in any Division be allowed to meet as often as they feel disposed."

After some discussion the matter was left in the hands of the Secretary.

Dr. Yellowlees and Dr. Carlyle Johnstone were appointed Representative Members of Council and Dr. L. C. Bruce to the Divisional Secretaryship.

On the motion of Dr. BRUCE, seconded by Dr. MARR, Dr. Oswald was appointed Examiner for the certificate of the Medico-Psychological Association.

The following members were suggested as Members of the Educational Committee:—Drs. Clouston, Yellowlees, Havelock, Turnbull, and G. M. Robertson.

The following members were suggested as Members of the Parliamentary Committee:—Dr. Yellowlees, Carlyle Johnstone, Clouston, Urquhart, and Carswell.

Dr. CARSWELL gave a short account of the institution of Girgenti introductory to a discussion upon "Habitual Inebriety."

Dr. Cunningham, Dr. Parker, ex-Baillie D. M. Stevenson, Dr. Devon, Mr. Motion, Dr. Macnaughton, ex-Baillie Steel, Dr. Yellowlees, Councillor Burgess, Councillor Maclay, ex-Baillie Battersby, Dr. Marr, and Dr. Clouston took part in the discussion, and Dr. Carswell replied.

Dr. CARSWELL moved that this Association pass a resolution to the effect that they approved of the recommendations by the Corporation of Glasgow, and particularly emphasised the need for legislation on the lines of Section 5, viz.:—"To give the Sheriff power to commit to a certified Inebriate Reformatory inebriates who have not been convicted before police courts, or habitual drunkards who may have been convicted of offences not presently included in the First Schedule to the Inebriates Act, 1898." Dr. YELLOWLEES seconded.

The recommendations referred to were approved of generally.

Votes of thanks to the Corporation of Glasgow for their hospitality and to Dr. Clouston for his conduct in the chair terminated the proceedings.

IRISH DIVISION.

The Spring Meeting of the Division was, by the kind permission of the President, held at the Royal College of Surgeons, Dublin, on Wednesday, April 27th, 1904. The following members were present, viz. Dr. Oscar Woods in the chair, Drs. Conolly Norman, J. Moloney, T. Drapes, F. E. Rainsford, P. O'Doherty, J. J. Fitzgerald, A. Fitzgerald, R. R. Leeper, W. Kelley-Paterson, J. O'C. Donelan, H. M. Eustace, and W. R. Dawson (Hon. Sec.). Communications explaining inability to attend were notified from Drs. M. J. Nolan, W. Graham, and J. Mills.

The minutes of the previous meeting were confirmed and signed, and the Secretary made a report with reference to various points arising out of them.

The following were elected ordinary members:—Edward J. McKenna, M.B., B.Ch., Assistant Medical Officer, District Asylum, Carlow (proposed by Drs. J. J. Fitzgerald, Conolly Norman, and W. R. Dawson); Arthur A. Burrell, B.A., M.B.,

T.C.D., Assistant Medical Officer, St. Patrick's Hospital, Dublin (proposed by Drs. R. R. Leeper, Conolly Norman, and W. R. Dawson).

ELECTION OF DIVISIONAL OFFICERS.

The following were unanimously elected:—Dr. W. R. Dawson, Divisional Secretary; Drs. M. J. Nolan and A. D. O'C. Finegan, representative members of Council. Dr. F. E. Rainsford was nominated as Examiner *vice* Dr. M. J. Nolan, retiring by rotation.

DATES AND PLACES OF NEXT MEETINGS.

It was decided to ask Dr. Lawless to allow the next meeting to be held at Armagh District Asylum early in July. The kind invitation of Dr. Rainsford to hold the autumn meeting at the Stewart Institution was unanimously adopted.

REPORT OF COMMITTEE.

The Committee appointed with reference to the Poor Law Reform Commission presented their Report, which was received, and the Committee was continued.

DIVISIONAL EXPENSES.

The Secretary brought under the notice of the meeting the recommendations of the Committee of the Council with reference to divisional expenses.

VOTE OF THANKS.

A unanimous vote of thanks was passed to the President of the Royal College of Surgeons of Ireland for kindly permitting the use of the College for the meeting.

COMMUNICATIONS.

1. Dr. DRAPES read a paper entitled "A Case of Acute Hallucinatory Insanity of Traumatic Origin" (see page 478).
2. Dr. RAINSFORD communicated "Some Remarks on Two Cases of Epileptiform Type, with some unusual Characteristics" (see page 513).
3. Dr. H. M. EUSTACE read an account of "A Case of Dementia Præcox" (see page 516).
4. Dr. CONOLLY NORMAN exhibited two patients suffering from deafness of one side, with unilateral auditory hallucinations affecting the deaf ear in each case.

RECENT MEDICO-LEGAL CASES.

REPORTED BY Dr. MERCIER.

[The Editors request that members will oblige by sending full newspaper reports of all cases of interest as published by the local press at the time of the assizes.]

Rex v. Rodgers.

Frank Rodgers, 15, was indicted for the murder of his mother. Prisoner's mother had been for years greatly addicted to drink, and her habit had greatly distressed her son, who took it much to heart. On the 12th of April he and one of his sisters had been spending the evening at the house of a friend, and returned to supper; his mother being in a drunken condition in an adjoining room. After supper he went upstairs, and took from a drawer a revolver belonging to his brother; loaded the weapon in one chamber; went down to his mother, who lay in a chair, and shot her through the neck. He then joined his sister in the drawing room, saying, "I have shot her; I think it is for the best;" adding subsequently, "It was for Queenie's sake. She could not be brought up to the life we have led the last few years;" Queenie being the name of a younger sister, aged about six. After further conversation, he suggested that a doctor should be fetched, and while the sister went out for the purpose, he took his little sister across the road to a small public house, and asked the landlady to take care of

her, saying that he had shot his mother, but she need not worry: it would be all right. He then read a newspaper until the arrival of the police sergeant who arrested him.

Dr. O. R. Ennion, who was called in to see the deceased, had attended the prisoner during the past year. Prisoner had grown about three inches in a year; had suffered from violent headaches, and from serious bleeding from the nose, resulting in anæmia. He saw the boy within a few minutes after the crime, and was of opinion that the prisoner behaved in quite an unnatural manner. He said "I have done it," and proceeded to talk about going to school next term; he was quietly reading the newspaper, and did not seem agitated or affected by what he had done, or to realise that he had done a wrong thing. The prisoner told the witness that, immediately before he fired the shot, he heard a voice saying "Do it quickly." The father of the deceased was addicted to drink, her brother and her great uncle had been epileptics, and had both been in asylums.

Dr. Percy Smith had examined the prisoner, who told witness of the voice telling him to do the act, and also repeated, several times, "There was no other way out of it." Having regard to the history of the case, and to his own examination, witness considered that the prisoner's mind was unsound at the time he committed the act; and that he was not then able to form a sound and rational judgment. The judge: In a sense, that is true of everybody who acts under the influence of passion?—Yes. You mean more than that?—I do not think there was any passion in this case. I did not ask you that. Do you mean there was a warping influence greater than, or other than, the influence of passion?—Yes, greater. Mr. Low (for the defence): And due to mental disease?—Yes. Would you describe this as a motiveless crime?—No, certainly not. It was not merely an act done on the impulse of the moment, but an act which he had considered beforehand?—Certainly. In answer to further questions, the witness testified that, in his opinion, the prisoner knew that he would be arrested, and would have to take his trial; but at the time he committed the crime thought he was doing right: his sense of right and wrong was dormant. He thought the act was, from the point of view of the comfort of his family, the right thing to do, whatever the cost.

Dr. Charlton Bastian was of opinion that at the time the prisoner committed the act, he was of unsound mind; and by this unsoundness of mind was deprived of the power of passing a rational judgment on the moral character of his act. He must have known the nature of the act, but he did not appreciate the difference between the right and wrong of it. In answer to a question by the witness, prisoner had said that he thought the result of committing such an act would be that he would have to take his trial, and be put away for a time.

Dr. E. C. Rogers of Fulbourne, who had examined the prisoner by instruction of the prosecution, was called for the defence, and read the report that he had sent to the Director of Prosecutions:—"I considered the prisoner not to be of sound and mature judgment, but find no other evidence of insanity at the present time. . . . I have formed the opinion that at the time of commission of the act, he was in a state of morbid mental exaltation, during which he made some effort to resist, but at last suddenly yielded to a recurrent impulse to commit a crime, for which an immature judgment had for some time led him to believe there was moral justification."

J. W. Rodgers, uncle of the prisoner, testified that a short time before the crime, when walking in the garden with the prisoner, the latter said, "Do you know, I fancy I see mother behind me."

In summing up, the judge is reported to have said that it is usually dangerous to attach too great importance to a theory that a crime has been committed under uncontrollable impulse; but, owing to the peculiar circumstances which had been laid before them, he thought they might assign great weight to the hypothesis in this case. The elements in the poor lad's case were first of all the predisposing tendencies—the insanity of the uncle, and the intemperance of the grandfather and mother; then the lad's own condition, growing extremely rapidly, and showing signs of physical disturbance; and the third element was the impression produced upon him by the family troubles. If the jury thought that, at the time, the lad was incapable of knowing that the act was morally wrong, they would find a verdict of "guilty, but insane." Without leaving the box, the jury returned this

verdict. Cambridge Assizes, Mr. Justice Phillimore.—*Royston Weekly News and Cambridge Express*, June 3rd.

The time is gone by when, in this country, a boy of fifteen could be hanged; and in any case, the verdict was the only one possible. The evidence of unsoundness of mind was clear, though not very strong. The heredity, the immaturity of age, and the evidence of hallucination were enough, in combination, to obtain and to justify the verdict of insanity. There are several noteworthy circumstances in the case. In the first place, the act was certainly premeditated: the lad went upstairs to fetch the revolver, and came down to shoot his mother. In the second, it is beyond question that he knew the nature of the act: he knew that he was shooting the deceased, and that the result of the shooting would be to deprive her of life. In the third, he knew that the act was wrong in the sense of being illegal; for he told Dr. Charlton Bastian that the result of it would be that he would have to take his trial. The evidence of all three medical witnesses was that he considered that, though the act was legally wrong, yet he was morally justified in doing it; and the plea of insanity was allowed, the judge charging the jury that if they thought the lad was incapable of knowing the act was *morally* wrong, etc. This is in direct contravention of Lord Brougham's contention, that only one kind of right and wrong should be recognised in such cases, and that "the right is when you act according to law, and the wrong is when you break it."

It does not appear from the report of the trial, which is a very full one, that the medical witnesses laid any stress upon the extremely rapid growth of the prisoner just before the crime; though the judge alluded to it in his summing up. This seems to me one of the most important factors in the case. I am accustomed to impress upon students the frequency with which moral aberration, as well as the intellectual deterioration, occur in young people who are, or have recently been, growing very rapidly. It seems as if growth and development draw upon a single store of energy; and when much is taken for the service of the one, little is left for the service of the other. When the draught made upon the common store of energy, for the service of growth in bulk, is inordinately large; development in complexity, evidenced mainly in the highest regions of the brain, may, must, and does suffer. Hence we find that children who are precociously clever are stunted in growth; or, at any rate, are stationary in growth during the time of their precocity: and when the regular alternation takes place, when growth asserts itself, and proceeds, as, in such cases it often does proceed, with undue rapidity; the cleverness disappears, the child becomes dull, and may fall behind, in intelligence, other children of his age. The many cases of moral aberration in young people, in which propensities show themselves to theft, to incendiarism, to crime of various kinds, are almost invariably associated with unduly rapid growth.

The judge's charge was noteworthy also for its introduction of the doctrine of "uncontrollable impulse." This is a defence, alternative to the defence of "not knowing," and is the only alternative ever admitted in a court of law, although there are many cases in which the

plea of insanity is raised, and is established, in which the one formula is as inappropriate, and as difficult to satisfy by the facts of the case, as the other. The judge said that though it was usually a dangerous theory (he meant hypothesis), yet, in this case, he thought great weight might be attached to the plea of "uncontrollable impulse." At the time he said this, he had evidently made up his mind that the lad ought to be found insane, and was wavering whether to ground the insanity on want of knowledge, or on uncontrollable impulse. Subsequently, he abandoned the latter, and elected to abide by the former test. But it is noteworthy that no third alternative occurred to him, nor, as far as I know, has any third alternative ever been submitted to a court of law.

It is noteworthy that in this, as in so many other cases reported in this Journal, the evidence of the expert, who had examined the prisoner at the instance of the prosecution, was placed at the disposal of the defence; and that the medical witnesses were allowed to give evidence as to the probable state of mind of the prisoner at the time the crime was committed,—evidence which has often been excluded.

Rex v. Samways.

Lucy Elizabeth Samways, 25, domestic servant, was indicted for the murder of her illegitimate child, Walter, æt. 3. The child had been placed in the care, successively, of various persons, and at last with a Mrs. Booth. The prisoner was behindhand in her payments to Mrs. Booth, who had told her that, in consequence, she must take the child away; and she was, moreover, under notice to leave her place, her mistress thinking that the girl was not strong enough for her work. On the day that she left service, the prisoner took the child, which was then stout and well, from Mrs. Booth. She was seen with the child in her arms at 5.30, and at 6.30 she was without it, and told her step-brother and step-sister that it was dead. It was afterwards found floating in a watercourse, having only a shirt on, and the rest of its clothes were found at the top of the prisoner's box.

The facts being proved, and several witnesses having spoken to the fact that the prisoner had suffered greatly from pains in her head,—so greatly that she had threatened suicide on account of them, and had left service and gone home, also on account of them;

Dr. W. E. Good, medical officer of the prison at Dorchester, testified that, during the prisoner's detention in goal, she had shown no symptom of mental disease, and had not complained of pains in the head.

Dr. E. J. Day, medical officer of health, had found a scar on prisoner's head, apparently the result of a very severe blow of old date, and that she was deaf in both ears. She was a moral degenerate. Her standard of morals was totally different from other people's. She would think no more of putting her child into the water than of eating her dinner. Cross-examined:—She showed these symptoms of mental degeneration (in examination in chief the term is *moral degenerate*) by the sad stories which she had told. She seemed to have no control over her speech or her actions. The judge, interposing, asked the witness what he was referring to. Witness answered,—The many different stories she had told one and another. Supposing the crime had not been committed, would you have said that this woman was mad? No, I don't suppose I should. Do you think that, at the time this crime was committed, she thought she was doing wrong,—committing a punishable offence? I think she realised at the time that she had committed the crime, but that she did not know what she was doing. I don't think she understood it at that moment. You say that she would not know that she was doing wrong in putting her child into the water? I don't think so, because of her moral standard.

Dr. Kerr, Mayor of Dorchester, testified that he had examined the prisoner at the prison, and was the magistrate who committed her for trial. He concluded

that the prisoner did not apprehend in any way what she was doing; in fact, she was in an epileptic state. It was subconscious altogether. He did not believe she knew what she was doing at the time. His reason for that opinion was that the whole history of the trial pointed to it,—her attitude, her manner, her demeanour, the way in which the crime was committed. The Judge: I can't take this. It is mere opinion. Either give evidence as a medical man, or not at all. The Witness: Will your lordship allow me to explain? The Judge: No explanation is needed, and I hope you won't make any explanation. You had better leave the box.

Dr. Du Boulay had attended the prisoner in June and July, 1903, and had examined her in gaol. Her memory for former events was clear, but about the time of the crime it appeared to be a blank. He did not find anything else. Nothing pointed to any mark of mental disease; but, taken with the history of her life, the sudden pains in her head, and her moral character, he thought it showed that she had a very weak ill-balanced mind, and one which would be very easily upset by any severe strain or worry. The Judge:—I don't know what you mean by moral character? That she is the mother of an illegitimate child. That is one point which I rely upon, and which I think is to be relied upon. When she got into a dazed condition she would not know properly what she was doing. When he saw her in June and July 1903, he had not the least supposition that she was mad. She was thoroughly dazed, not knowing in the least what she was doing. She is just the sort of person who, through stress of severe circumstances, might lose her head, so to say. The Judge: You have not said anything which shows that she was not responsible for her actions. Witness: I tried to explain that she was so dazed at the time that she had not the least idea of what she was doing. She did everything automatically. From an ill-balanced mind you would expect that sort of automatic feeling to arise.

Dr. W. Burrough Cosens had examined the prisoner, and found that she had inflammation of the middle ear, with perforation of the drum and disease of the bone. A patient suffering from such disease was frequently subject to attacks of violence or imbecility which were temporary. After further evidence the Judge interposed: Do you think this evidence is of any use? How many more of such witnesses have you got to call? I don't think the multiplication of this kind of evidence will assist very much.

Dr. P. W. Macdonald, Superintendent of the Dorset Asylum, had examined the prisoner. He found that she was able to answer questions collectedly, but her memory of facts or recent dates was defective. She had not, in his opinion, any clear conception of the difference between an honourable act and a dissolute act. As to the crime, he was of opinion that she did not morally appreciate in its true sense the nature and quality of the act. In cross-examination, witness was asked to give specific instances of failure of memory, and did so.

The Judge summed up in a most merciful sense. After telling the jury that the definition of insanity was, that the person did not know that his or her actions were wrong, he went on to ask them. Did they think that she was responsible for her actions at the time or not? Did she do it deliberately, or did she, for some reason, not know the quality of the act. He pointed out that the crime was committed in such a way that it could not escape speedy detection. Coming to the medical evidence, was there any evidence throughout the case to show that the prisoner was anything like the creature painted by Dr. Day, who said she would have thought no more of throwing her child into the water than of eating her dinner? It was impossible gravely to put that evidence before the jury, and they would not attach any importance to it whatever. It seemed utterly and hopelessly off the line which they ought to follow. But there was one medical witness whose evidence was worthy of attention,—Dr. Macdonald. He got nearest the point, for he elicited that the prisoner had no clear conception of the difference between an honourable and a dissolute action; though why he used those words, instead of the simple words right and wrong, the judge did not know, for they amounted to the same thing. Then, the witness continued, she appeared to look upon acts with a different appreciation from what a normal person would, which was another phase for the same thing. All these indicated such a state of mind as lawyers understood by the word mad; and the jury would of course form their opinions whether it was

Dr. Macdonald's judgment that the prisoner was, in the legal sense of the word, insane, and therefore not responsible for her actions.

The jury, in five minutes, brought in a verdict of guilty but insane.—Dorset Summer Assizes, Mr. Justice Ridley.—*Dorset County Chronicle*, June 16th.

The prisoner was found insane in spite of the medical evidence to that effect, which rendered such a verdict extremely difficult. The prisoner might well have prayed to be saved from those of her medical friends, whose injudicious zeal on her behalf would have cost her her life, but for the acuteness of Mr. Justice Ridley in finding, in Dr. Macdonald's evidence, a crevice through which her escape could be contrived. It seems as if the sentiment of pity for the prisoner, and eagerness to save her from the consequences of her crime, had completely upset the judgment of some of the medical witnesses, so that they tumbled over one another, and lost sight of accuracy and common sense, in their anxiety to shriek to the jury, "For God's sake, don't hang the woman!" Their evidence really amounted to little more than this. Dr. Day's evidence was, that the woman was a degenerate, whether moral or mental does not much matter, and it appears that he is of opinion that a degenerate is irresponsible. When asked the symptoms of degeneracy, his answer was tantamount to the statement that the prisoner was a degenerate because she told lies! If every liar is to be held irresponsible, our gaols will have to be abolished and our lunatic asylums enlarged. Then he is reported to have said "She seemed to have no control over her speech or actions." This is not true of any insane person that I have ever seen, and would be too strong a statement to make of a person suffering from St. Vitus' dance. Such persons can usually move a limb, however jerkily and irregularly, with some approximation to the direction in which they desire to move it; and a person who has *no* control over her speech, would be dumb! How a person could realise that she had committed a crime, and yet not know what she was doing, it is very difficult to understand. To me the two statements appear contradictory and irreconcilable.

Dr. Kerr concluded that the patient was in an epileptic state. Whether he meant in a state of *epilepsie larvée*, or of post-epileptic automatism, does not appear; nor is he reported to have given any ground whatever for supposing that the prisoner ever had a fit. No other medical witness suggested that the prisoner was epileptic. Dr. Kerr did not believe that she knew what she was doing at the time of the crime; but when asked the reason for the faith that was in him, all he had to say was that the whole history of the trial pointed to it—her attitude, her manner, her demeanour, the way in which the crime was committed. The way in which the crime was committed was not described in the evidence, and appears to be unknown. How her attitude at the trial, whether sitting, standing, or kneeling, could have indicated that she did not know what she was doing at the time of the crime, is very difficult to appreciate; as is the difference between her manner and her demeanour. Under the circumstances, it is not surprising that the witness was stopped by the judge; but when the latter objected that the witness was giving evidence of opinion only, it is equally difficult to understand his objection. Presumably, the witness was called

to give evidence of opinion. What the judge probably meant was surmise.

Dr. Du Boulay's opinion, that a person of bad moral character is more easily made insane, by any severe strain or worry, than a person of good moral character, is scarcely in accordance with the experience of alienists. I know of no statistics which bear out the opinion. That the prisoner, when she got into a dazed condition, would not know properly what she was doing, is probably true; but there was not the slightest evidence that, at the time of the crime, the prisoner was in a dazed condition. On the contrary, one of the witnesses who saw her just before, said that she was "pitying" the child very much; and the prisoner had told her sister that she had found the child very ill, and only arrived at Mrs. Booth's in time to see the last of it;—a deliberate falsehood, quite inconsistent with the supposition that she was dazed when she committed the murder. Dr. Du Boulay further testified that, when he saw her in 1903, she was so dazed that she did not know in the least what she was doing, and yet she was not mad. This is another example of looseness of expression that ought to be impossible—most of all in the witness-box and by a witness on oath. A person so dazed, as not to know in the least what she is doing, must be unconscious; and it does not appear that Dr. Du Boulay considered her unconscious. But supposing that she had been, in 1903, in a state of unconscious automatism, to say that, therefore, she was, when she committed the crime, so dazed as not to know in the least what she was doing, and that she did everything automatically, was a gratuitous assumption, quite inconsistent with the facts of the crime itself, as far as they are known. In the face of such evidence, it is not to be wondered at that the judge interposed.

Dr. Macdonald's evidence was, no doubt, as strong as his examination of the prisoner warranted him in giving; but it was weak and colourless; and would have been utterly insufficient to rescue the prisoner from a verdict of guilty, if the judge had not already made up his mind that she must be found insane. There seems to be no doubt that she is not a completely normal person; that her memory is defective; that the defect of memory is an indication of other mental insufficiency; and that it would be scarcely just to apply to her the strictest standard of responsibility; but, all things considered, the court took a most merciful view of her case. Had she been the victim instead of the criminal, and had her murderer been a man, as to whose insanity no stronger evidence could have been adduced than was given of hers, he would certainly not have been found insane. And in returning, as they would in such a case have done, a verdict of guilty, *simpliciter*, the jury would have carried with them the consent of the community.

It is, I think, to be regretted that medical practitioners, in giving evidence in a court of justice, should pay so little regard to exactitude of expression, as they did in this case. No doubt they were actuated by a sentiment, of pity for the wretched prisoner, which does them honour; but a witness in a court of law should bear in mind Talleyrand's maxim—*surtout, point de zèle!* The preposterous exaggeration of expression, which some of the witnesses allowed themselves to use, was not serviceable, but was extremely detrimental to the cause they had at heart.

It is manifest that everyone in court—judge, jury, witnesses, and counsel, both for the defence and for the prosecution,—desired to find the prisoner insane; but her own medical witnesses very nearly compelled the judge to pronounce sentence of death! It was impossible to attach serious importance to opinions so wild, so unsupported by observation, so widely at variance with fact; and the usual effect of such evidence is to raise a prejudice in the minds of the hearers against the cause in which it is adduced.

THE BALLINASLOE APPOINTMENT.

Though the majority of our readers will have already become familiar with the outlines of this remarkable transaction, we feel that it may not be without interest to supply some details.

Soon after the demise of the late Dr. Fletcher it became evident that there was going to be trouble about the appointment of his successor. As early as December, 1903, a local newspaper, advocating the appointment of the senior A.M.O., expressed in somewhat grandiloquent language the hope that "the asylum committee are not likely to do anything that would give a handle to 'the enemy,' at home and abroad, for retarding—or putting forth greater and more open energy in that direction—the process of equalising and levelling up the classes whose opportunities have been hitherto unwarrantably and unjustly restricted." Another nationalist newspaper followed in the same strain: "It is true that the religion of the candidate is not that of the controlling authority," but "the very suggestion of religious rancour should not enter into such an appointment" (*Westmeath Independent*, January 2nd, 1904). But, in yet another local paper (*Connaught Leader*, January 9th, 1904), it is sneeringly suggested that the gentleman in question should be "elected by a Catholic board to govern a Catholic asylum," "because he happens to be a Protestant." And so the issue was knit.

Certain newspapers, including some of a strong nationalist complexion, adjured the committee to promote the senior officer on principles of fair play, and pointed out that to make the question one of religion would be injurious to the character of the popular body which would base such an appointment on such grounds, and would thereby hinder the ulterior prospects of democratic government. Elsewhere, however, the securing of an immediate triumph for the religion of the majority was plainly indicated as the duty of the asylum committee.

The subject continued to occupy the local press for some months. From one paper, which persistently denounced the introduction of the religious test, and which spoke of the coming election as "a trying ordeal for Ireland," we learn that "the appointment will be made practically by an archbishop, two bishops, a vicar-general, a canon, and two parish priests of the Catholic Church." So it would appear that the spiritual estate is well represented on the Ballinasloe Asylum Committee!

Finally the day of election came, and the proceedings of the committee on the occasion are very fully reported in the local papers. We find from the *Westmeath Independent*, of April 16th, 1904, that the chairman of the committee, one of the bishops above referred to, proposed the appointment of the Junior Assistant Medical Officer to be Medical Superintendent, speaking very highly of that gentleman's worth. Another committeeman, Mr. Thomas Byrne, seconded the Bishop's motion, and spoke thus:

"My lords, it affords me great pleasure to arise and second the motion proposed by Dr. MacCormack. In doing so I desire to say at once that I do so through no motives or feelings of prejudice, or indeed feelings akin to sectarian feeling of any kind. I do so simply on the ground that ——— (the junior A.M.O.) is equal in distinctions, honours, and degrees to the other candidate (the senior A.M.O.). Another thing, this is an institution that is a boon to the poor afflicted patients of the counties of Galway and Roscommon, and each and everyone here knows 97

per cent. of them are Catholics—at least 96 *per cent.* That being so, and when we have a candidate of equal merit and distinction before us as a body composed of Roman Catholics, which is the religion also of the patients, to have a man of the same faith and feelings as those he is in charge of, it is our right and privilege, and we should be equal to take advantage of it. If we did not do it we would be less than men. The time is come when the people should put forward men of their own religious beliefs. I don't do that through any religious or rancorous feelings; I do it on the ground it is time for us to have the opportunity of putting men of our own religious belief in the governing ranks of the institutions of the country."

This gentleman was followed by Mr. Galvin, who appears to be chairman of the Roscommon county council, who proposed the senior A.M.O. "in the interests of that spirit of fair play which gives to a man the reward of merit." In his vigorous remarks Mr. Galvin denied that the religious aspect of the question should be considered, and said the public service would suffer unless "the ordinary reward of merit is in front" of hard-working and able officials. He was supported by Mr. P. J. Kelly, who seconded his motion, remarking, "I think it my duty to stand up and say—as one burning with a fierce Catholicity—that I don't think that Catholicity or religion should be dragged into this election. . . . Let it not be said to-morrow or next day that we are unworthy of home rule, for we are too bigotted. . . . I have gone through the fire much more than your Lordship or your Grace for Catholicity, and I say that the senior A.M.O. should be returned." Another member following on the same side wanted a cause for anyone being "pitchforked in over the senior doctor's head. It is without justice or fair play as it is." Hereon Mr. Byrne observed "I did not propose the junior A.M.O. on sectarian grounds. I proposed him because 97 *per cent.* of the patients were Roman Catholics." The election having taken place and the junior A.M.O. being chosen by seventeen votes to five, Dr. Healey, Archbishop of Tuam, said that when you have two men eminently and equally clever the committee should be free to give their vote to the man of their own choice. He also reminded the committee that on the occasion when the senior A.M.O. was appointed Dr. Healey had urged them to select a Roman Catholic, but had been defeated by a casting vote. He spoke highly of the candidate who had now been rejected, and said he would support a proposal for a substantial increase to his salary.

It is the law in Ireland that the appointment of a medical superintendent requires the confirmation of the Lord Lieutenant. When the appointment at Ballinasloe was in due course notified to the Lord Lieutenant for this purpose the Irish Government made a remarkable display of their usual qualities. They at once requested the committee to state "the reason for passing over the senior assistant medical officer of the asylum, who was also acting medical superintendent" in their "nomination" of medical superintendent. The committee replied that they did not "nominate," but "appoint," and added, "we deny the right of any man demanding a reason—whether individually or collectively—for our voting for or against any particular candidate." Thereupon the Lord Lieutenant confirmed the appointment.

THE PRICE OF A NOSE.

We are glad to be able to say that one other journal besides our own, and before we had an opportunity of so doing, has commented upon the case of cruelty at Ballinasloe. Though many papers have enlarged upon such other aspects of Ballinasloe management which could give rise to a polemic discussion, ill-usage of patients would appear to be a thing so consistent with the *raison d'être* of lunatic asylums as to be scarcely worth notice. We must credit our Nationalist contemporary, the *Western News*, however, with taking an interest in this matter. That paper writes as follows, commenting on the action of a member of the committee who was anxious to exonerate the offender:

"Father Begley's feelings are of a highly-strung mixed order. He expressed

unbounded sympathy with the 'poor country boy' who was fined £5 for striking a raving, pinioned lunatic a blow that would fell an ox, and which scattered the poor wretch's blood about the floor, as if a bull were bled on it.

"The 'poor country boy' striking a roped-up lunatic and smashing his nose is truly an object for refined sympathy! A 'poor boy' six foot eight inches in height, within a few paces of other attendants and a whistle in his pocket, smashing down on the face of a man whose arms were pinioned. We say that the 'poor boy' ought to have been tried by a jury and got penal servitude, but then religion so refines human feeling!

"If ratepayers, whose friends may be afflicted and seek protection at this institution, find that wanton brutality is condoned by religion, we should like to know with what feelings of security they consign their friends to lunatic shambles, if they are to earn that name. We should like to know what they pay rates for? Isn't the 'poor boy' paid for his 'risks,' just as a soldier or policeman is paid, and is he to murder a man if he suspects danger of any sort?

"We think Father Begley ought to ease the mind of this county on this point. He is elected to protect the poor and afflicted and helpless. He is entitled to give assurance that they shall be protected for the money paid. He is not entitled to shake public confidence in this great institution by one breath of sympathy with wanton, cowardly blackguardism.

"The one thing we see in the case is that the magistrates^d utterly failed to do their duty in inflicting a fine."

The language of this extract is possibly stronger than we are accustomed to, and it certainly loses force by being so personal, but we are inclined to agree with the last sentence. It must be remembered, however, that in another asylum in the West of Ireland some time ago the Committee decided to retain the services of an attendant who had got two or three months in gaol for a savage assault upon a patient.

BALLINASLOE ONCE MORE: COMIC RELIEF.

The Irish are a singular people. There was a time when their gaiety was supposed to be irrepressible, but Thackeray discovered that in truth their character is fundamentally melancholy and their joviality a mere blind. It was a pleasant quality, and he who has to deal with Irishmen now may regret that it appears to have been almost burned out by the fires of controversy, political and other. Appropriately enough the little fun that is yet remaining in the land seems to find refuge in asylums. That agreeable facility for raising a laugh, even at his own expense, which characterised the Irishman of Sam Lover and Charles Lever, is hardly to be found anywhere else. We had occasion not long ago to comment on the uncrowned buttons of the Cork Asylum. Ballinasloe Asylum, though handicapped by a late start, has won in this race by a whole length, for that institution, we learn from the *Dublin Daily Express* of June 22nd, has not only discharged "the round and top of sovereignty" from its buttons, but has dismissed "On His Majesty's Service" from the outside of most of its envelopes. A few which are designed to cover communications addressed to the Inspectors are still to retain the Royal superscription. There must be some complicated joke here which we fail to appreciate. Why a letter to a patient's friends announcing his death or discharge should be "On the People's Service," while a similar letter to the Inspectors should be "On His Majesty's Service," is only to be understood if we admit with the late Mr. Robert Montgomery that God made the thunder, but the lightning made itself. According to a report furnished by an interviewer to the *Irish Times* of June 23rd these changes were suggested by the new medical superintendent. There is a curious conservatism about retaining on modern envelopes any unmeaning representative of the old system of franking letters. The Committee were also very angry because the Inspectors in writing to them addressed them as "Gentlemen" instead of "Lords and Gentlemen." This shows another inconvenience that arises from following antiquated custom. Surely even in

Ireland official letters are usually written in the third person. But the whole of these dignified proceedings suggests too great respect for antiquity. In all modern theatrical performances the farce comes first and then the serious piece. Why is this order reversed in Connaught? Why should this comic *bonne bouche* follow instead of preceding the much more serious pieces that have lately been played on the same stage?

LUNACY LEGISLATION.

The following is the text of the Bill to amend the Lunacy Acts introduced into the House of Commons on May 18th by the Attorney-General and the Solicitor-General:

A BILL to amend the Lunacy Acts.

BE IT ENACTED by the King's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

1. *Visits to licensed houses.*—Notwithstanding anything in section one hundred and ninety-one of the Lunacy Act, 1890 (hereinafter referred to as the principal Act), the Commissioners may by order direct that until further order any licensed house, whether licensed by them or by justices, and not authorised by the licence to receive more than ten patients, may be visited by one Commissioner.

2. *Temporary care of incipient lunatics.*—(1) If a medical practitioner certifies that a person is suffering from mental disease, but that the disease is not confirmed, and that it is expedient, with a view to his recovery, that he be placed under the care of a person whose name and address are stated in the certificate for a period therein stated, not exceeding *six months*, then during that period the provisions of section three hundred and fifteen of the principal Act shall not apply.

(2) The certificate must not be signed by the person under whose care the patient is to be placed.

(3) Where a medical practitioner signs any such certificate he shall, within one clear day after signing it, send a copy of it to the Commissioners, and the Commissioners may visit the patient to whom the certificate refers.

(4) The person who receives a patient under any such certificate shall, within one clear day after receiving the patient, give notice to the Commissioners of his reception, and if the patient dies, or the residence of the person receiving him is changed, within the period mentioned in the certificate, shall within two clear days give notice of the death or change of residence to the Commissioners.

(5) He shall also, within two clear days after the expiration of the period mentioned in the certificate, or if he ceases to have the care of the patient at an earlier date then within two clear days after that earlier date, send a report to the Commissioners stating whether the patient recovered, and, if not, in what manner he was dealt with when the person making the report ceased to have the care of him under the certificate.

(6) If default is made in sending any notice or report required by this section, the person in default shall be guilty of a misdemeanour and be liable to a penalty not exceeding *fifty pounds*.

(7) No person shall under this section receive more than one patient at the same time.

(8) After the expiration of the period mentioned in the certificate another certificate under this section in respect of the same patient shall not be given within *two years* from the date of the expiration.

3. *Amendment of s. 116 (1) (d) of principal Act.*—Section one hundred and sixteen of the principal Act (which relates to the administrative powers of the Judge in Lunacy) shall have effect as if in paragraph (d) of sub-section one the words "or arrest of mental development" were inserted after the word "age."

4. *Jurisdiction of Masters in Lunacy.*—Subject to rules of court, the jurisdiction of the Judge in Lunacy (including power to make orders in lunacy and such orders as can be made in the Chancery Division of the High Court) may be exercised by

the Masters, and every order of a Master in that behalf shall take effect unless annulled or varied on appeal in manner provided by such rules.

B. Short title, construction, and commencement.—(1) This Act may be cited as the Lunacy Act, 1904, and shall be construed as one with the Lunacy Acts, 1890 and 1891, and this Act and the Lunacy Acts, 1890 and 1891, may be cited together as the Lunacy Acts, 1890 to 1904.

(2) This Act shall come into operation on the *first day of January Nineteen hundred and five*.

CORRESPONDENCE.

From Dr. R. S. STEWART, Glamorgan County Asylum.

Without entering into a discussion of Dr. Mercier's views on the subject of stress, I wish to point out that my use of the word is clearly defined in my paper on "Wages, Lunacy, and Crime" in the January number of the JOURNAL, in which I speak of "stress in the ordinary sense of the term," and that the quotation "insanity is, and ever will be, the product of two factors, stress and heredity" is from an article on puerperal insanity, by Dr. Robert Jones, in the *American Journal of Insanity* for April, 1903.

ASYLUM WORKERS' ASSOCIATION.

The Annual Meeting of the Asylum Workers' Association was held on May 17th, at 11, Chandos Street, under the presidency of Sir James Crichton Browne. The meeting was numerously attended. The report shows that there has been a considerable falling off in the number of ordinary members, who now number 3606 as compared with 4902 in 1902. This decrease is due to the increase of the subscription.

The distribution of medals awarded for long and meritorious nursing services in asylums was made by the President, viz. gold medal to Mr. W. Headon, Devon County Asylum; silver medals to Mr. J. Alexander, Notts County Asylum, Miss E. Atkins, Caterham Asylum, and Miss E. Gribble, Holloway Sanatorium.

The financial statement shows that the receipts had increased, and that the balance at the end of the year was £86 15s. 3d.

The Homes of Rest Fund had made grants of £55 to twenty-one applicants.

Sir James Crichton Browne, who has acted as president for the past seven years, retires, and is succeeded by Sir John Batty Tuke.

CHALFONT COLONY CHRONICLE.

The first number of this new periodical has appeared, and gives promise of being a successful and useful publication.

The history of the formation of the colony, illustrated by a portrait of Mr. Passmore Edwards, constitutes the *pièce de resistance* of this number.

The editors apparently would be desirous of receiving contributions and news from other colonies, and to make it a vehicle of communication for all epileptics who are in single cure houses or institutions.

THE ANNUAL MEETING.

Dr. James Russell, of Hamilton, Ontario, Canada, has been appointed by the American Medico-Psychological Association a delegate to attend our next Annual Meeting.

OBITUARY.

JOSEPH PEEKE RICHARDS.

Mr. Joseph Peeke Richards, whose somewhat sudden and unanticipated death was announced in the last number of this Journal, has been for many years a member of the Medico-Psychological Association, and his loss is regretted by many of its members.

Mr. Richards was the son of a medical man, practising in London, and was educated at King's College, of which he became an Associate. Becoming qualified in 1863, he took the post of Resident House Surgeon to the Stockport Infirmary, where he remained several years.

His next appointment was to the post of Assistant Medical Officer to Devon County Asylum, and he exchanged this for a similar position at the Hanwell County Asylum under Dr. Murray Lindsay. This office he held for several years, and ultimately succeeded Dr. Lindsay as Medical Superintendent of the female department. This post he held for upwards of twenty years, and finally retired on a liberal superannuation allowance, a recognition by the asylum authorities of the able and successful discharge of his duties through so long a period.

Mr. Richards was distinguished by his conscientious devotion to duty, his methodical habits, and his great personal sympathy with his patients. He was a very successful asylum administrator, and having a thorough knowledge of his profession was equally successful in his treatment of mental disease. His geniality and genuine kindness won him the affection of his patients and the esteem of his colleagues, as well as a large circle of friends.

Mr. Richards, since his retirement from office, has had at times somewhat indifferent health, but his death, at the comparatively early age of sixty-three, must have come as a painful surprise to all who knew him intimately. His loss is mourned by a widow, son, and two daughters.

Medico-Psychological Association of Great Britain & Ireland - NOTICES BY THE REGISTRAR.

EXAMINATION FOR THE NURSING CERTIFICATE.

Seven hundred and twenty candidates applied for admission to the May examination for this certificate. Of this number 517 passed, 179 failed to satisfy the examiners, 21 retired or withdrew, 2 were disqualified, and 1 result from South Africa has not been received. Appended is a list of the successful candidates:

ENGLAND.

Cumberland and Westmorland.—Male: James D. Williamson. Female: Anna Fraser.

Derby.—Female: Ada Kilmartin.

Devon County.—Males: John Bailey Connett, Charles H. W. Bridglands. Female: May Shelley.

Durham County.—Males: Lewis Strachan, Harry Lintott, Charles Mason, Thomas Foster, William Macklin, William McIntosh. Female: Agnes Ellen Dent.

Essex County.—Males: George Henry Barker, Edward George Wadsworth. Females: Agnes Mary Campbell, Clara Wilson.

Kent County, Barming Heath.—Female: Minnie S. Naughton.

Kent County, Chartham.—Male: Harold Parkinson Smith. Female: Louisa Morse.

Lancaster.—Males: Robert Tyldesley, Robert Fairclough, Alex. Harper, Edward Wendell, Walter E. Kewley, David Mercer. Females: Hannah Fogg, Kate Moncrieff, Rose Phillips, Margaret Dempsey, Edith Manning, Margaret Bowker, Ellen Sanderson, Ellen Allen.

Lancaster, Rainhill.—Males: Frederick Gloss, Archibald William Diddams, Thomas Taylor, Harold Frank Prince, Fred Russell, Frank Paxton, William Thomas Howells, James Bishop, William Davies, Ernest Burbridge. Females: Margaret Isabella Andrew, Jeannie Hyams, Kate Martin, Ida Annie Clark, Beatrice V. Sutherns, Clara Willets, Mary Hannah Touhey, Beatrix West, Alice Burton, Annie Gee, Alice Moxon, Janet Weir, Clara Addison, Ethel Stenner.

London County, Bexley.—Males: Thomas Frederick Evans, Frederick William Barber, John Baptiste Hoban, Harry George Grace, John Thomas Chantree, Charley Fearnley, John Ogden, Michael Hayes, John English. Females: Florence E. Grace, Florence Alice Phillips, Kathleen McGurrell, Edith Medhurst, Margaret M. Highgate, A. M. Trinnear, Hebe Staples Lloyd, Annie E. Williams, Florence C. Atkins, Ada Hovell, Margaret Durant, Sarah Nightingale.

London County, Cane Hill.—Males: Frederick James Millwood, Humphrey M. Marshall. Females: Kathleen Allen, Maud Amy Alice Jones, Ada Mary Rees.

London County, Claybury.—Males: Richard Perry, Herbert A. Wilson, Samuel Williams, Robert Ellis Roberts, Patrick Geoghegan. Females: Mary Catherine Jones, Annie E. Ingram, Frances Daisy Keates, Helen Mildred Wood, Louisa Jane Mitchell, Amy Harriett Shirley, Alice Maud Hemming, Matilda Kean, Mary E. Goodey, Alice Standing, Marguretta McGurgen, Ida Berlon (private nurse examined at Claybury).

London County, Hanwell.—Females: Abigail Bird, Fanny G. Watkins, Kate R. Symons, Maud Clarke, Alice Smokham, Alice E. Sharp, Maud Mitchener, Elfrida Richards Goff, Laura Louisa Welsh, Jessie Churcher, Annie Thorne, Emma Jane Stevens, Bertie Carlo, Martha Wheeler, Sarah Farr, Florence E. Jones.

London County, Epsom Manor.—Females: Lilian Maud Drake, Agnes E. Hanarahan.

Middlesex County.—Males: Alfred Forrow, Charles Draper, Frederick G. Yendell, Edward Hulme. Females: Phoebe E. Lawrence, Jessie Smith, Mary Walsh, Edith Ellen Carnall, Nellie Campbell Harvey, Florence Boyle.

Norfolk County.—Females: Alice Abbs, Emily Adelaide Penfold.

Salop County.—Males: Richard Morgan, John Price, Charles Evans, Richard Alfred Williams, Charles Bunner, John Crumpton, George Harry A. Ratcliffe. Females: Annie Arnsby, Mary Evans, Edith M. Edwards, Rachel Hannah Ratcliffe.

Stafford County, Burntwood.—Males: Alfred Philip Breeze, Lambert Jones, Rupert George Fernyhough, John Thomas Thacker. Females: Eliza Harriett Cadwallader, Mary Dulson.

Stafford County, Cheddleton.—Female: Ethel Howard.

Somerset and Bath.—Females: Catherine B. F. Woodward, Lily Alice Baker, Hester Jane Selfe, Alice Poole, Florence Lilian Gardiner, Minnie Devenish, Lucy Petheram, Eliza Sophia Clarke.

Suffolk County.—Females: Mary Looney, Helena Mary Britton, Eve Ward, Henrietta Ward, Marion Emily Minton.

Surrey County, Brookwood.—Females: Minnie Jane Powell, Frances A. Eccles, Kate Davies, Adeline Mary Crook, Florence Rawson Berry, Beatrice Ellen Webb, Ellen Lavery, Mary Bearman.

Sussex, Hellingly.—Males: Thomas Gorton, William Sims, Herbert Waring. Females: Emily James, Daisy Evelyn Tann, Alice H. Druce, Nellie Collingwood.

West Sussex.—Females: Evelyn Lanning, Gertrude Margaret Maguire, Edith Alice Preece, Florence Emma Pitts, Gertrude Evelyn Eveleigh.

Warwick County.—Males: Frederick George Davies, William Sydney Clements, James William Cluff. Females: Lydia Sharp, Elmeda Mary Jones, Harriett Amy Belcher.

Wilts County.—Males: John Walker, Edwin Allen, Henry Imber. Female: Emma Taylor.

Yorks, North Riding.—Male: John Quinn. Females: Lucy Hoborough, Mary E. Butterworth, Mary E. Raisbeck, Hope Partridge, Mary Geraghty, Annie Newman.

Yorks, Wadsley.—Males: James Gittus, John William Brain, Osman Inman, George Arthur Cardwell, William Jacobs, Henry Bee, William Hirstle. Females: Florence Green, Alice Mabel Nicholls, Annie E. Jackson, Lottie Rose, Clara Culham, Frances Creaser.

Yorks, Wakefield.—Males: William Moorhouse, Harold Hodgson, Henry Anstey, Walter Wriggleworth.

Birmingham City, Winson Green.—Males: George Palmer, William Vincent. Females: Lucy Holland, Ellen Rodway, Eveline L. Townsend, Mildred L. Quinn.

Birmingham City, Rubery Hill.—Males: Thomas Alfred Cole, William Beaumont. Female: Mabel A. Noke.

Bristol City.—Males: Frederick Clee, Charles March, Joseph S. Smith. Female: Catherine Inch.

Derby Borough.—Males: Charles Curtis, Hector Gordon. Females: Mabel J. M. Bellhouse, Thurza Gaunt, Emma C. Smith.

Exeter City.—Females: Beatrice Crook, Emma Colwill, Alice Gosland, Lucy Sercombe.

Hull City.—Males: John Gormer, William E. Scown.

Newcastle City.—Males: William Whitfield Hudson, Thomas Robinson. Females: Margaret Beattie, Annie Maver Lindsay, Alice Rushford.

Notts City.—Males: Herbert Spencer, Fred. Tomlinson, P. L. Johnson-Laird, Henry F. W. Leech. Females: Ada Jackson, Florence E. Flick, Alice Green.

Caterham.—Male: George Albert Windsor. Females: Elizabeth Warren, Florence A. Day, Maggie Flannigan, Clara Lynds.

Leavesden.—Males: Frank Phillips, Charles James Rogers, Albert W. Hayes. Females: Mary Minnie Boyle, Emily Collyer, Ethel M. Franklin, Frances Crowle, Alice M. Sabin.

City of London.—Males: Samuel Giddings, Charles Thompson Peters, Alfred Walter Hills. Females: Alice May Powell, Alice L. Simmons, Ethel P. Joyce, Eleanor Munns, Margaret Connolly.

Camberwell House.—Females: Emilena M. J. Copeland, Florence C. Townsend.

Holloway Sanatorium.—Females: Alice Catherine Chew, Beatrice Anna Gumley, Violet A. Winn, Lena E. Frances, Ethel F. Tribe, Isabell Stockwell, Alice Powell.

Moorcroft.—Male: John George Turton.

Redlands.—Male: William James Smith.

Retreat, York.—Male: Fred Richard Richards. Females: Jane Pattison, Elsie C. Bow, Bertha Cuill.

Woodend House.—Female: Isabel Hansen.

WALES.

Abergavenny.—Males: Francis H. Carter, Thomas George, Albert William Griffiths. Females: Louisa Ann Bevan, Harriett Jackson, Amy Powell, Lizzie Roberts, Addie Wozencroft.

Glamorgan.—Males: David Bevan, Thomas Morgan Davies, John L. Jones, Richard Knowles, Thomas J. Murphy, T. William Nekrewes, Joseph Taylor, Benjamin John Toby. Females: Jane Bevan, Gertrude Annie Drower, Elizabeth John, Rachel Jones, Elizabeth Beatrice Missenden, Eva Louisa Missenden, Alice Owen, Gwenllian Elizabeth Thomas, Esther Anne Walters.

SCOTLAND.

Aberdeen Royal.—Females: Lizzie Fyfe, Robina Lyyatt.

Ayr District.—Males: James Adams Mustard, John McAleese, Peter Sutherland, Lewis Birnie. Females: Rose Jackson, Jane Anderson, Grace McQueen, Isabella M. R. Diack.

Crichton Royal.—Males: William Carruthers, Robert Garrick, William Rattray, David Lockhart Park, Allan McPhee, David Soutar. Females: Annie Ralph, Joan Mather.

Dundee Royal.—Females: Barbara Ferguson, Elizabeth Dorward, Frances McKenzie, Robina MacBrayne, Margaret MacLennan, Margaret Milne.

Edinburgh Royal.—Males: John Scott, Alexander Quirie. Females: Elizabeth Cameron, Margaret Hughes, Minnie G. Cameron, Annie Sinclair, Annie Thom, Helen J. Mercer, Lizzie Ramsay Aikman, Annie Strachan, Mary Ellen Le'Tellier, Selina Strachan, Jessie Thomson, Jessie Allan, Hilda Muriel Geikie.

Fife and Kinross.—Males: David Oliphant, William Neville, William Geddes, Frederick Carver. Female: Margaret Gilmore.

Gartloch.—Females: Marion Gillies Nicol, Annie Henry, Hannah McArthur, Maggie Duncan, Mary Ross Stevenson, Jeannie Holmes.

Gartnavel.—Male: Alexander Guild. Females: Elizabeth Cox, Daisy Findlay, Mary Williamson, Helen Diver.

Inverness District.—Male: Donald MacMillan. Females: Mary Miller MacGregor, Grace Henry Mackay, Kate Gunn, Caroline Whitmore.

Lanark District.—Males: Peter Meldrum, Dugald Campbell. Females: Maggie McLeod, Elizabeth Anderson, Matilda T. Hutchison, Helen Davidson, Elizabeth Simpson Kernahan, Lily Ashton, Wilhelmina Ferguson.

Mavisbank.—Male: Barbara Fisher Greenslade. Female: Esther Mitchell Porter Braid.

Melrose.—Female: Jeannie Gilchrist.

Midlothian and Peebles.—Male: George Smith, Females: Jessie McRae, Sarah McCann.

Montrose Royal.—Males: Joseph Robertson, William McNab.

James Murray's, Perth.—Females: Alice Leys, Bessie B. Murdock, Annie B. Thomson, Isabella McIntosh Lumsdaine, Margaret Jane Forster.

Stirling District.—Males: Alexander Moffat, John Hendry. Females: Mary Mackintosh, Jessie Cowan, Maggie Espey, Elizabeth Watt, Catherine Sillas Campbell, Susan Macpherson, Jane Campbell Gillies, Minnie Morrison, Bessie Stewart Taylor.

Woodilee.—Males: William Davidson, Albert Roberts, Andrew R. Davidson, John Clarke, Samuel Irvine, Stewart C. Smart, Samuel Dawson, Alexander McKelvie. Females: Grace Lambie, Helen Taylor Campbell, Agnes Keating, Catherine McGregor Fleming, Mary Gavin, Margaret Whyte Anderson, Frances K. Gemmel, Catherine McKenzie.

IRELAND.

Armagh.—Males: John Haffey, James McMahon, George Fleming, Patrick Tominey. Females: Barbara Rice, Mary McMahon, Emily Stewart, Lizzie Finlay, Annie Kelly, Annie Stewart.

Ballinasloe.—Males: Michael Finneran, Patrick Lally, Thomas Donlon, John Shaughnessy, John Kenny, James Fallon, Michael Murray, Patrick J. Geraghty. Females: Mary Hickey, Annie Coyle, Mary White, Bridget Keating.

Carlow.—Males: Marcus Park, Martin Brennan, Thomas Hade. Females: Maria Brennan, Kate Doyle, Kathleen Collins, Winifred Reddy, Kathleen Wynne, Margaret Murphy.

Clonmel.—Males: John Healy, Michael Corbett, Richard Quinlan. Females: Margaret Bryne, Annie Teefy.

Donegal District.—Males: Dan Lecky, Michael Brolley.

Enniscorthy.—Males: John Hughes, John Foley, Walter Carter, John Leary.

Kilkenny.—Males: Martin Bowe, James Cahill.

Londonderry.—Male: Robert Cairns. Females: Susan McGill, Maria Jane Cunningham, Ellen M. McGill, Ellen Kearney, Mary Smyth, Elizabeth Carolan, Mary E. McElhinney.

Omagh District.—Males: John J. McElrae, Robert Hopper. Females: Catherine Moss, Bridget Brogan, Mary Anne Doake, Sarah Williamson, Maggie McCrory.

Richmond.—Males: Thomas Harnill, Mark McParland, Robert Costello, Patrick Cunningham. Females: Margaret Elizabeth Geary, Elizabeth S. Thompson, Maria J. O'Leary, Sarah E. Beattie, Anna Maria McKenna, Mary Kate Yourell, Nellie Tyndall.

Richmond, Portrane.—Males: John Kelly, John Benton, Lawrence Power, Timothy McNamara, Peter Brennan, Martin Kavanagh. Females: Mary Maxwell, Katie Sweetman, Ellen Hughes, Kate O'Connor, Johanna Sheahan, Jane Moran, Rosanna McPhillips.

Waterford.—Male: Michael Daniels.

Bloomfield House.—Males: Lawrence Hudson, John O'Toole. Females: Margaret Haughton, Charlotte S. Cummins.
St. Edmundsbury.—Female: Sara Anne Grice.

SOUTH AFRICA.

Grahamstown.—Males: Walter Arthur Parsons, Henry John Gray, Ronald John Rogie.

The following is a list of the questions which appeared in the paper.

1. What signs would lead you to expect that a patient is going to have a Fit? What precautions would you take when you witness these signs?
2. What is Dropsy? Where is it most common? How would you recognise it?
3. What is Seclusion? What is the rule to be observed about it?
4. What are the principal parts of the Nervous System? Of what parts is the Brain composed? Describe briefly the functions of the Cerebrum.
5. What is the Urine? What is its daily normal quantity? What particulars should be noted by a nurse with regard to the Urine?
6. What should you do in the following emergencies:
 - (a) A patient, while walking in the grounds, swallows a quantity of yew leaves, which you know to be poisonous.
 - (b) A patient falls in the ward and sustains a simple fracture of the Femur.
 - (c) A patient thrusts his hand through a pane of glass and severs the Radial Artery.
7. Give six examples of occasions when you would consider it your duty to make an immediate report to a medical officer.
8. What are the chief differences between treating a case of Mental Disorder at the patient's home and in an institution? How would you act if sent to take charge of an insane patient in a private house?
9. How would you keep patients clean who are confined to bed? Describe carefully the process of sponging a patient.
10. What do you understand by the term "Insane Ear" (Hæmatoma Auris)? Give an account of any case of this you have seen from its commencement to its termination.

EXAMINATION FOR NURSING CERTIFICATE.

The next examination for the Nursing Certificate will be held on November 7th, 1904. Candidates are earnestly requested to send in their schedules, duly filled in, to the Registrar of the Association (Dr. Alfred Miller, Warwick County Asylum, Hatton, near Warwick) not later than Monday, October 10th, 1904, as that will be the last day upon which, under the rules, applications can be received.

NOTE.

As the names of some of the persons to whom the Nursing Certificate has been granted have been removed from the Register, employers are requested to refer to the Registrar in order to ascertain if a particular name is still on the Roll of the Association. In all inquiries the number of the certificate should be given.

EXAMINATION FOR PROFESSIONAL CERTIFICATE.

The next examination for the Certificate in Psychological Medicine will take place on July 7th, 1904, at Bethlem Royal Hospital, London, at 10 o'clock a.m., in Edinburgh at the Royal Asylum, and in Dublin at the Richmond District Asylum.

GASKELL PRIZE.

The examination for the Gaskell Prize will be held at the Bethlem Royal Hospital, London, on Friday, July 8th, 1904, at 10 o'clock a.m. Candidates for the examination must give fourteen days' notice of their intention to sit to the Registrar.

NOTICES OF MEETINGS.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

The Sixty-third Annual Meeting of the Association will be held on Thursday and Friday, July 21st and 22nd, 1904, at the rooms of the Association, 11, Chandos Street, Cavendish Square, London, W., under the Presidency of Dr. R. Percy Smith.

There will be meetings of Committees as follows on Wednesday, July 20th, before the Annual Meeting: Educational Committee at 3 o'clock, Parliamentary Committee at 5 o'clock.

There will be a Council Meeting at 9.30 a.m. on Thursday, July 21st.

The Annual Meeting will commence at 11 a.m. on Thursday, when the usual business of the Association will be transacted.

2 p.m. :—The President's address, after which the following papers will be read :—
 "The Educational Treatment of Young Epileptics," by G. E. Shuttleworth. "A Plea for the Closer Study of the Body-weight and its Relation to Mental Disease," by C. Hubert Bond.

Friday, at 10 a.m. :—"Further Histological Studies in the Localisation of Cerebral Function" (illustrated by a series of lantern slides), by A. W. Campbell. "The Finer Anatomy of the Nervous System, with special reference to the Doctrine of Continuity as opposed to the Neurone Doctrine" (illustrated by lantern slides), by John Turner. "The Psychology of Hallucinations" (with diagrammatic representations and stereoscopic slides), by W. H. B. Stoddart.

2 p.m. :—"Asylum Ideals and Improvements in the Care of the Insane," by G. M. Robertson. "The Question of how to Provide Accommodation in regard to Chronic and Incurable Cases of Mental Disorder," by J. Milson Rhodes. "The occurring Pauper Lunacy of Glasgow Lunacy District and the Provision for its Care and Treatment," by J. Carswell. (*The order of papers is subject to alteration by the President.*)

The Annual Dinner will take place on Thursday, July 21st, at the Whitehall Rooms, Hôtel Metropole, at 7.30 o'clock. Tickets One Guinea (wines included).

Members are requested to notify their intention of dining to the Secretary.

The President and Mrs. Percy Smith invite members of the Association and a lady to a Garden Party at the Botanical Gardens, Regent's Park, N.W., from 4 to 7 o'clock on Friday, July 22nd, and members of the Association are requested to forward their acceptances to Mrs. Percy Smith.

South-Eastern Division.—The Autumn Meeting will be held, by the courtesy of Dr. Chambers, at The Priory, Roehampton, on Thursday, October 6th, 1904.

Northern and Midland Division.—The Autumn Meeting will be held, by the courtesy of Dr. Sheldon, at Parkside, Macclesfield, on Thursday, October 13th, 1904.

South-Western Division.—The Autumn Meeting will be held, by the courtesy of Dr. Weatherly, at Bailbrook House, Bath, on Friday, October 28th, 1904.

Irish Division.—The next meeting will be held, by the courtesy of Dr. Lawless, at the Armagh District Asylum early in July, 1904. The Autumn Meeting will be held, by the courtesy of Dr. Rainsford, at the Stewart Institution, Chapelizod, co. Dublin.

APPOINTMENTS.

Fennell, Charles H., M.A., M.D.Oxon., M.R.C.P.Lond., Second Assistant Medical Officer, Tooting Bec Asylum.

Gibb, James A., M.B., Ch.B.Aberd., Assistant Medical Officer to the Dorset County Asylum.

Hay, Joseph F. S., M.B., C.M.Aberd., Inspector of Lunatic Asylums, Hospitals, and Licensed Houses in the Colony of New Zealand.

Hutchison, Alex., M.A., M.B., Ch.B.Aberd., Assistant Medical Officer, Kingseat Asylum, Aberdeen Lunacy Board.

Kirwan, James StL., M.B., B.Ch., R.U.T., Resident Medical Superintendent of the Ballinasloe District Lunatic Asylum.

Neish, D. B., L.R.C.S., L.R.C.P.Edin., Junior Resident Medical Officer,
Government Lunatic Asylum, Kingston, Jamaica.

Rotherham, A., M.B., B.C.Camb., Medical Superintendent of Darenth Asylum.

Thomson, Eric M., M.A., M.B., Ch.B.Aberd., Senior Resident Medical Officer,
Government Lunatic Asylum, Kingston, Jamaica.

Williams, D. J., M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent,
Government Lunatic Asylum, Kingston, Jamaica.

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VOL. L.

Part I.—Original Articles.

*The Presidential Address, on Paranoia, delivered at
the Sixty-third Annual Meeting of the Medico-
Psychological Association, held in London on July
21st and 22nd, 1904.* By R. PERCY SMITH, M.D.,
F.R.C.P.

IN taking up the office of President of the Association, I wish first of all to convey my thanks to the members for having appointed me to this honourable position, which is at the same time so full of onerous duties, and to assure them that during my tenure of it no effort will be wanting on my part to maintain the honour and interests of the Association. The first onerous duty which is put upon the shoulders of the President is that of giving a presidential address, a duty which I can assure those who have not yet passed the chair involves no small amount of anxious thought and work throughout the year of probation allowed to the President before taking up his office.

The subject which I have chosen for my address to-day is one which does not appear to have been touched upon by former Presidents. It is that of Paranoia—its position as a clinical entity, its relationship to other mental disorders and the consideration of the claim of its supporters that it is to be

regarded as a primary disorder of intellect, in contradistinction to what have been called the affective mental disorders. That this cannot be considered a new subject is true inasmuch as the term "paranoia" has been in use in German literature on mental diseases for the last thirty years, being first used apparently by Kahlbaum in 1874 and as a generic term for systematised delusional states by Krafft-Ebing in 1879 and by Mendel in his article "Paranoia" in Eulenberg's *Realencyclopädie*.

Spitzka, of New York, appears first to have used the word in the English language and adopted it as a preferable term to monomania, in the second edition of his work on insanity published in 1887.

In this country the term "paranoia" seems at first to have been received with little favour, and in fact until the tragic case of King Ludwig II of Bavaria, in 1886, it was little heard of, and certainly the writers of English text-books on mental disease at that time did not make use of the term.

In Dr. Ireland's article on "The Insanity of King Louis II of Bavaria," at page 150 of his work *Through the Ivory Gate*, is to be found a copy of the certificate signed by four physicians as to the nature of the King's insanity, the first paragraph of which was as follows:

"His Majesty is in a far advanced state of insanity, suffering from that form of mental disease which is well known to alienist physicians of experience as paranoia."

Dr. Ireland's book was published in 1889, and in a foot-note he quotes from Séglas as saying that "paranoia is perhaps the one word in psychiatry that has the most extensive but most ill-defined acceptance"; he speaks of it as mainly used by German and Italian physicians and says the paranoia of Snell is not the same as the paranoia of Westphal or of Meynert or of Krafft-Ebing. He offers the following definition: "Paranoia is a mental affection of hereditary origin, generally of a slowly advancing character, with illusions and hallucinations and delusions, often of persecution and grandeur. Sometimes the two varieties of delusions are combined. The emotional faculties are seldom deeply affected, and the logical power is the last to suffer, the patient reasoning acutely from false premises. The mental enfeeblement does not appear to be great. In the chronic form the disease is regarded as incurable.

Some writers will not admit of an acute form of paranoia." In the works of Maudsley, Blandford and Savage the word is not to be found, nor in Bevan Lewis's *Text-book of Mental Diseases* (1889).

In the third edition of Clouston's *Mental Diseases*, published in 1892, there appeared for the first time a short paragraph on paranoia at the end of the chapter on monomania. Again in 1892 there appeared in the *Dictionary of Psychological Medicine* an article on paranoia by the late Dr. Hack Tuke beginning with the sentence "The use of this word has become very frequent in Germany and in the United States, but it has not obtained favour in Great Britain." He defined it as meaning "a condition of which chronic and systematised delusion is the essential sign," referred to it as synonymous with the German *Verrücktheit*, and pointed to the fact that while Griesinger held that emotional disturbance was the first link in the chain, Koch and the majority of German alienists did not agree with this view. The question of the primary affective or primary intellectual disorder in paranoia, *Verrücktheit*, or delusional insanity, I shall frequently refer to. The references to paranoia in *The Journal of Mental Science* for the past twenty years are to be found almost entirely in reviews of books and papers published in other countries, with, however, one important exception, namely the paper "On so-called Paranoia" read by Dr. E. L. Dunn of Wakefield Asylum before the Psychology Section of the Annual Meeting of the British Medical Association, held at Nottingham in July, 1892, and published in *The Journal of Mental Science* for January, 1893. He referred to the Greek word "paranoia" as simply meaning madness, and as now being used synonymously with the German "*Wahnsinn*," and "*Verrücktheit*" and implying systematised insanity. He gave a review of the history of the recent developments of the paranoia question up to that date, pointing out the initial difficulty that while the term is useful if limited to the class of cases termed "paranoia persecutoria" by German writers and "*délire chronique*" by Magnan and other French writers, where there is chronic mental disorder, whether associated with neurotic or insane inheritance or not, yet that there is great confusion introduced by the comprehension in this group of acute forms first described by Westphal in 1878 and admitted by Meynert, Amadei, Tonnini and others, although denied by

Krafft-Ebing, Morselli, Tanzi, and Riva. Dunn himself objected to the inclusion of acute forms. With regard to the diagnosis of paranoia from other forms of mental disorder, especially from melancholia, Dunn made the remark "The affective state is always secondary to the delusive, and is the logical reaction to it," thus adopting what I think is one of the fallacies of continental writers with regard to this aspect of the matter. In the discussion which followed, the late Dr. Hack Tuke referred to the time when English alienists were thought behindhand in not adopting the term "Verrücktheit," and that now "paranoia" was substituted for it.

But if English thought moves slowly, it as a rule moves soundly, and I think it will be acknowledged that there has been very good reason for not adopting without much consideration a grouping of cases as to which continental writers are still by no means unanimous.

I well remember being struck by the way in which foreign visitors to Bethlem Hospital between the years 1885 and 1898 were inclined to call a very large proportion of the cases shown to them cases of "paranoia," so that whatever the original conception was, it became evident that there was a danger of the term being applied to most cases in which hallucinations and more or less fixed delusions were present regardless of their history, many acute cases becoming thus grouped together which English observers regarded as not belonging to the same category.

I wish next to refer to the important discussion on the limitation and differential diagnosis of paranoia which took place at the meetings of the Psychiatrische Verein of Berlin, in 1893 and 1894. The full account of this is to be found in the 51st volume of the *Allgemeine Zeitschrift für Psychiatrie*, 1895. To Dr. Cramer, at that time the Assistant Physician of the Eberswalde Landesirrenanstalt, was referred the task of summarising the existing views and drawing up a report on the subject for the purpose of discussion. In Cramer's paper on the "Abgrenzung und Differential-Diagnose der Paranoia," published in the volume referred to, the whole matter will be found to be very fully stated, and I have much pleasure in acknowledging my indebtedness to him for much of the material of this address.

Cramer begins by stating that although there is a fair agreement that mania and melancholia are primarily "Stimmungs-

anomalien" (abnormalities of mood), the different meanings of authors in those psychopathies which do not come into this group are irreconcilable. He refers to Westphal's description of Primäre Verrücktheit (*Allg. Zeitsch.*, Bd. xxxiv, p. 252) and Mendel's article on paranoia, already referred to, as being very clear and trenchant, but says that hopes of unanimity were not fulfilled, because Werner in his monograph on paranoia (Stuttgart: Enke, 1891) writes that now with the introduction of the word "paranoia" a confusion and a host of expressions for the same form of disease have been put forward. Cramer starts by grouping psychoses into:

1. Stimmungsanomalien (mania and melancholia).
2. Paranoia.

His endeavour is to show that all the disorders described under the names "Wahnsinn," "Verrücktheit," "Paranoia," "Verwirrtheit," "Amentia," "asthenisches Delirium," and others have a common characteristic disturbance of mental function.

Cramer gives a very comprehensive summary of the literature on the subject, to some of which we must refer.

He quotes Hoffman ("Ueber die Eintheilung der Psychosen," *Allg. Zeitsch.*, Bd. xix) as understanding by "Verrücktheit" a disease in which a special motive (hallucinations and delusions) affects judgment, feeling, and conduct, and becomes the groundwork of a "Gedankensystem," the disease being free from the internal and external signs of "affect" (disturbance of feeling or emotion).

He quotes Westphal (*Allg. Zeitsch.*, Bd. xxxiv, p. 252) as being the first who spoke of an acute development and course of "Verrücktheit," as recognising Sander's group of cases of "originäre Verrücktheit," as describing a form of "abortive paranoia" characterised by imperative ideas, and as saying that a "formal disturbance of thought may be absent but may increase up to complete confusion."

Westphal further lays down that "the essential in Verrücktheit is the abnormal process in ideation," and that mood, feeling, and "affect" are essentially dependent on the contents of the ideas and sensory delirium. ("Stimmung, Gefühle und Affecte sind wesentlich abhängig von dem Inhalte der Vorstellungen und Sinnesdelirium.")

Cramer quotes Fritsch ("Die Verwirrtheit," *Jahrb. f. Psych.*, Bd. ii, p. 27) as giving to the acute cases the name "Verwirrtheit" (confusion) in contradistinction to Westphal's "Verrücktheit" and essentially different in onset, course, and mental condition from it.

He quotes Meynert ("Die acute hallucinatorische Form des Wahnsinns und ihr Verlauf," *Jahrb. f. Psych.*, Bd. ii, p. 181) as holding that "acute primäre Verrücktheit" differs from primäre Verrücktheit or Wahnsinn in the absence of typical growth from hypochondriacal or persecutory stages, and in the absence of logical growth by reasoning, but is, on the contrary, an acute hallucinatory state with confusion.

Meynert, however, thinks the change of mood to be dependent on hallucinations.

Meynert later (*Klinische Vorlesungen über Psychiatrie*, 1890) elaborates his earlier hallucinatory Verwirrtheit, which he calls by the unfortunate term "amentia," and while distinguishing the fixed delusional conditions of paranoia allows that the latter may often include conditions of exhaustion transitional to amentia.

Schüle (*Klinische Psychiatrie*, 1886) uses "Wahnsinn" as equivalent to paranoia, dividing into acute, chronic, and atonic groups, and holds that both in acute and chronic cases the mood is simply reactive and secondary to hallucinations.

Salgo (*Compendium der Psychiatrie*, 2 ed.) belongs to those who hold that in Verrücktheit there must be psychical weakness associated with systematised hallucinations and delusions, and that acute hallucinatory Verwirrtheit, under which he includes cases of acute delirium, may either be primary or may interrupt the course of chronic Verrücktheit.

Wille ("Zur Lehre von der Verwirrtheit," *Arch. f. Psych.*, Bd. xx, p. 228), again, recognises Verwirrtheit with hallucinations and illusions, and also an "acute paranoia," characterised by systematised and constant delusions underlying the confusional delirium.

Meyser ("Zum sogenannten hallucinatorischen Wahnsinn," *Allg. Zeitsch. f. Psych.*, Bd. xlii, p. 113) uses for both Verwirrtheit and acute paranoia the name "asthenisches Delirium," and includes in it delirium from morphia, chloral, carbonic acid, etc.

Mendel ("Paranoia," *Eulenberg's Realencyclop.*) groups these cases together, calls the disease paranoia, and distinguishes a primary and secondary form: "Die primäre Paranoia ist eine functionelle Psychose die characterisch ist durch das primäre Auftreten von Wahnvorstellungen." With regard to feeling, he says: "Das Fühlen richtet sich nach dem Inhalt der Wahnvorstellungen und ändert sich mit diesen." He objects to Westphal's abortive form of Verrücktheit as belonging to obsessions or imperative ideas.

Mendel divides primary paranoia into simple and hallucinatory, and each of these into acute and chronic. It is necessary to give his conclusions with regard to Paranoia hallucinatoria acuta. It has a prodromal stage, followed by general delirium, with great disorder of consciousness and hallucinations of nearly all senses, rapid flight of ideas and "allgemeine Verwirrtheit" or general confusion.

Mendel's description shows how comprehensive had become the conception of paranoia, as including conditions known to others as confusional insanity and acute delirium.

Werner, on the other hand (*Die Paranoia*, 1891), tried to combine the different views as to paranoia, but entirely excluded "acute Verwirrtheit" (Meynert's amentia).

Kirchoff (*Lehrbuch der Psychiatrie*, Leipzig, 1892), on the contrary, divides paranoia into—(1) Wahnsinn, (2) Verrücktheit, (3) Verwirrtheit, saying that in all paranoia there is systematisation of delusion. Wahnsinn he considers an acute part of paranoia with delusions and hallucinations and marked emotional disorder, while in Verrücktheit the "affect" is only a chance condition. Verwirrtheit he considers only a secondary condition after Wahnsinn and Verrücktheit, and says: "Verwirrtheit may

also show the elements of paranoia before or after their full development, at one time the foundation stones, at another the ruins of the structure."

Serbski ("Ueber die acuten Formen von Amentia und Paranoia," *Allg. Zeitsch. f. Psych.*, Bd. xlviii, p. 329) endeavours to separate amentia acuta from paranoia acuta, but considers it difficult. He claims for amentia—(1) confusion, (2) "affect," either throughout or in certain stages only, (3) disturbance of association, very marked at the height of the disease. He recognises that transient confusion may sometimes be present in chronic primary Verrücktheit.

Schönthal ("Ueber die acute Hallucinatorische Paranoia," *Allg. Zeitsch.*, Bd. xlviii, p. 379) separates Verwirrtheit from acute paranoia as follows:

"Acute paranoia (Wahnsinn) is distinguished from Verwirrtheit by the more detailed structure of the delusions and the greater clearness of mind, as opposed to the more delirious type of the changing delusions and marked confusion of consciousness in Verwirrtheit."

In referring to the works of French authors Cramer gives full credit to the work of Lasègue in describing "délire des persécutions," Morel's description of an early hypochondriacal stage passing into delusions of persecution and grandeur, constituting "folie systématisée," and to the works of Foville, Legrand du Saulle, P. Garnier, Jaquet, and Falret with regard to these states.

He gives also a good summary of the prolonged discussion in the Société Médico-Psychologique of Paris in the year 1888 on the question of the relationship of insanity to degeneration, and the question of establishment of a special form of chronic systematised delusional insanity, to which the name "délire chronique" was given by Magnan, and which he separated entirely from "folie des dégénérés," but without his views meeting with universal acceptance.

With regard to the acute forms included under paranoia by German writers, Cramer quotes Chaslin as claiming that writers in France first described cases which are neither mania, melancholia, nor "délire des dégénérés." He states that Chaslin describes the condition of "confusion mentale primitive" (acute onset, often exhaustive or toxic in origin, with confusion, loss of association, changing emotion or apathy) as synonymous with the following very comprehensive list, in which will be noticed the German "acute primäre Verrücktheit," hallucinatorischer Wahnsinn, Verwirrtheit, mania hallucinatoria, amentia, and paranoia acuta, which we have already referred to.

Chaslin identifies confusion mentale primitive with the following :

1. Démence aigüe (Esquirol, Brierre de Boismont).
2. Stupidité, stupeur (Georget, Delasiauve, Dagonet).
3. Confusion, confusion hallucinatoire (Delasiauve).
4. Délire de depression (Lasègue).
5. Délire d' inanition (Becquel).
6. Torpeur cérébrale (Ball).
7. Acute primäre Verrücktheit (Westphal).
8. Hallucinatorischer Wahnsinn (v. Krafft-Ebing).
9. Hallucinatorische Verwirrtheit (Meynert, Fritsch).
10. Verwirrtheit (Wille).
11. Acutes asthenisches Delirium (Mayser).
12. Acuter Wahnsinn (Schüle).
13. Hallucinatorische Verworrenheit (Konrad, Scholz, Solgo).
14. Asthenische und hallucinatorische Verwirrtheit (Kraepelin).
15. Hallucinatorisches Irresein (Fürstner).
16. Dementia generalis oder subacuta (Tilling).
17. Mania hallucinatoria (Mendel).
18. Amentia (Meynert, Serbsky).
19. Dysnoia, polyneuritic psychosis (Korsakoff).
20. Délire sensoriel (Schernschenski).
21. Folie générale (Rosenbach).
22. Paranoia acuta, oder hallucinatoria (different authors).
23. Primary confusional insanity (Spitzka).
24. Acute hallucinatory confusion (Spitzka).
25. Stupor, delusional stupor (Hayes Newington).
26. Acute confusional insanity (C. Norman).
27. Frenosi sensoria acuta (Morselli).
28. Stupidita (Morselli).

Lastly Cramer quotes Ségla (" Le Paranoia, délires systematisées et dégénérescences mentales," *Arch. de Neurol.*, t. xiii), who does not believe that an acute Verrücktheit in Westphal's sense belongs to paranoia, but approaches more nearly to certain melancholic or maniacal conditions, as saying : " Les observations ne nous ont montré aucun caractère pathomique, qui puisse permettre au moins par un côté de rapprocher cette paranoia aigüe de la chronique, qu'elle soit dégénérative ou non."

Cramer refers but little to English writers, and evidently is

inclined to regard their views as obsolete, and says that Italian writers have either followed the French or the German school.

As the result of his researches Cramer comes to the conclusion that although Wahnsinn, Verrücktheit, and Verwirrtheit (Amentia) must be looked upon clinically as separate disease pictures, they are separated from the simple functional psychoses on the common ground of absence of primary disorder of feeling, and he groups them together as paranoia. He entirely disagrees with Salgo that there is any groundwork of weakmindedness in Verrücktheit, and says that the "Schwerpunkt" of the disorder is a disturbance in the ideational sphere (Vorstellungssphäre). Paranoia is according to him a functional psychosis to be separated from the other great group of functional psychoses with "Stimmungsanomalien."

He acknowledges, however, the difficulty in separating cases of paranoia beginning with subacute course and depressive character, which are very near to melancholia, but begs the question by saying, "These difficulties disappear if one holds firmly to the view that paranoia is a disease of the intellect in which 'affects' only play a secondary rôle." ("Diese Schwierigkeiten lassen sich überwinden wenn man streng daran festhält dass die Paranoia eine Erkrankung des Verstandes ist, bei der die Affecte eine secundäre Rolle spielen").

Cramer's conclusions are—

1. Verwirrtheit (Amentia), Wahnsinn and Verrücktheit have clinically and genetically a common range of important symptoms.

(a) The ground-symptoms, hallucinations, delusions, and incoherence, are genetically nearly related to one another.

(b) The predominating symptom of Verwirrtheit, of Wahnsinn, and of Verrücktheit is disease of the understanding (Verstandesthätigkeit).

(c) In Verwirrtheit, Wahnsinn, and Verrücktheit the emotions play only a secondary rôle.

(d) Verwirrtheit (Amentia) may appear symptomatically both in Wahnsinn and Verrücktheit.

2. That the points of differential diagnosis between Verwirrtheit, Wahnsinn, and Verrücktheit do not destroy the common groundwork of the three "Krankheits-bilder."

3. That the group of simple uncomplicated functional psychoses with disorder of feeling (Stimmungsanomalien) entails

as a second great principal group paranoia (disorder of the understanding).

4. That paranoia is sharply divided from the *Stimmungs-anomalien* and complicated psychoses.

5. That henceforth the definition of paranoia must run : "Paranoia is a simple functional psychosis. It is characterised by a disease of the intellect (or understanding) in which 'affects' play only a secondary rôle."

In the "Schlusswort" (after the discussion) he modifies this and concludes that the simple functional psychoses fall into three groups—

1. Group of "*Stimmungsanomalien*," a change in emotion *remaining in the foreground of symptoms*.

2. The paranoia group, characterised by the prominence of disorder of the understanding.

Between these are transitional forms.

3. Ania, marked by loss of understanding and of emotion.

Leaving now the position of paranoia as set out by Dr. Cramer in 1895, I will come down to the present date. For this purpose I have taken the recent editions of the text-books of Krafft-Ebing, Ziehen, and Kraepelin as embodying the German views, and the articles by Drs. Anglade and Arnaud in Ballet's *Traité de Pathologie Mentale*, just published, as embodying the French views on this subject. Cramer, in the historical section of his paper before quoted, summarised the views of the three German professors, but it seemed to me essential to have their views in their more recent publications. Professor von Krafft-Ebing, of Vienna, whose death while the seventh edition of his *Lehrbuch der Psychiatrie* (1903) was passing through the press we must all deplore, has never admitted that paranoia should include acute and curable conditions.

Under the heading of "Psychoneuroses" he puts—

1. Melancholia.

2. Mania.

3. Stupidität, or primary curable dementia.

4. Hallucinatory Wahnsinn.

5. Secondary Verrücktheit and terminal dementia.

And under the heading of "Psychical Degenerations" he puts—

1. Katatonia.

2. Constitutional affective insanity (*folie raisonnante*).
3. Paranoia.
4. Periodic insanity.

His "hallucinatory Wahnsinn" includes what other authors have named acute primary Verrücktheit (Westphal), hallucinatory Verrücktheit, mania hallucinatoria (Mendel), and delusional stupor (Newington), and includes many exhaustive, toxic, and post-febrile delirious states and most of the maniacal puerperal psychoses. He has never seen it pass into systematised paranoia, and refuses to recognise the disease as an acute paranoia, although he allows that confusional states may be episodic in paranoia. Even though he takes this view, however, he seems to be unable to shake off the idea that moods and "Affekte" in hallucinatory Wahnsinn are entirely reactive to hallucinations and delusions.

His "secondary Verrücktheit" includes all psychical states in which delusions formed in the primary affective stage (of mania and melancholia) remain as lasting errors of understanding (*Verstandesirrhümer*) and as more or less stationary morbid groups of ideas, in spite of the subsidence of the original affective disorder. This corresponds with the English "secondary delusional insanity" resulting from acute attacks in which there are fixed delusions, but no definite systematisation or elaboration (Mercier's "fixed delusion").

He divides paranoia as follows :

Die Paranoia—

- I. Die originäre Paranoia.
- II. Die tardive (erworbene) Paranoia.

A. Paranoia persecutoria.

1. Die typische Form der erworbenen Paranoia, unterformen der Paranoia persecutoria ; die Paranoia sexualis.
2. Das Irresein der Querulanten und Prozesskrämer.

B. Paranoia expansiva.

1. Die Paranoia inventoria.
2. Die religiöse Paranoia.
3. Die erotische Paranoia.

He also places paranoia neurasthenica and paranoia (sexualis) masturbatoria under the head of mental diseases dependent on constitutional neuroses.

Krafft-Ebing says paranoia is a chronic mental disease occurring exclusively in those damaged by inheritance, and often developing on the basis of constitutional neuroses, the chief symptom of which is delusion.

“ These delusions, in contrast to those present in mania and melancholia, are primary creations of the diseased brain independent of any affective origin (jeglicher affective Entstehungsgrundlage enbehrende), bound together systematically and methodically by process of conclusion and judgment to a formal delusional structure in contrast to the delirium of ‘ Wahnsinn.’ ”

And further : “ The point of the disease lies not as in melancholia and mania in primary affective and psycho-motor disorder, but in disorder of the sphere of ideation ” (Vorstellungssphäre). Krafft-Ebing believes in the chronic course and slow development of the disease, which, according to him, never ends in dementia ; neither has he seen recovery, but only remissions. He does not agree with the view that paranoia is a chronic form of Wahnsinn.

It is a remarkable fact that some of the advocates of the primarily intellectual disorder of mind in paranoia, to the exclusion of affective disorder, are at any rate driven to classify it on an affective basis. Thus we find depressive and expansive forms described, and Krafft-Ebing divides his “ tardive,” or acquired, paranoia into persecutory and expansive groups.

Let us now see if Krafft-Ebing’s claim for the absence of affective disorder in the early stage of the disease is borne out by his clinical description.

In the first place, with regard to “ originäre Paranoia,” which he considers to be rare, he says there is often early neurasthenia, hysteria, hypochondriasis, and sexual perversion, especially masturbation—conditions in which at any rate affective mental states cannot be excluded ; and, further, he says candidates for this disease are psychically slack, dull, sentimental, tending to hypochondriasis and eroticism, and of easy susceptibility in sensitiveness and emotion.

Again, with regard to the cases of paranoia persecutoria developing later in life, the typical form of acquired paranoia, he says, “ The subjects of this morbid process are mostly from childhood upwards peculiar, quiet, shy, retiring, hypersensitive, irritable, distrustful people, not rarely also with a tendency to hypochondria.”

Surely this condition implies a special aptitude for painful feeling, and with such a history it seems a bold thing to say that the mental disorder when it appears has no affective basis.

He, however, repeats later that emotional disturbances are "sekundäre Affecte" and "the natural, so to speak physiological, reaction to the primary alteration of the Ego."

When speaking of the "Querulanten" he again says: "The candidates for this form of disorder fall early as a result of their egoism, anger, brutal dogmatism (Rechthaberei), and measureless overestimation of self into conflict with their surroundings."

It seems to me that delusional states which arise on this basis cannot be considered to be devoid of a primary affective groundwork.

Again, with regard to the expansive form he says "the nucleus is delusion of distinguished personality, sustained by exalted self-feeling and *partly developed out of it*. The future delusion is already latent in the whole mode of thought and intuition." Here, at least, he allows the possibility of a primary affective state, or at least one existing concurrently with delusion and not merely secondary to it.

When we come to paranoia religiosa, Krafft-Ebing acknowledges that such cases often arise in persons who from childhood have a tendency to excessive religiosity, and points out the frequent association of increasing religious exaltation with eroticism, two conditions in which it seems to me it is absolutely impossible to exclude a primary "Affect" as early as, or earlier than, a purely intellectual disorder. Indeed, the importance of the element of feeling is recognised by Krafft-Ebing when he says that in the first or passive stage the patient "is simply observant and receptive of the *sublime feelings* and hallucinations developing in him," and in the second or active stage the ready delusion makes itself known.

In the so-called erotic paranoia, although it is usually said that the morbid love in these cases is platonic, yet it is impossible to imagine that affective disorder does not occur quite early, and Krafft-Ebing allows that in men "the abnormal characteristics can be recognised early in a tender, sentimental direction of feeling." I do not think I need pursue Krafft-Ebing's views further.

Professor Ziehen, of Utrecht, in the second edition of his

Psychiatrie, published in 1902, divides the "affective psychoses" (mania and melancholia) sharply from the intellectual, under which he includes "Stupidität" (= acute primary dementia and Newington's anergic stupor) and paranoia (see Table).

His definition is: "We include under the conception of paranoia all those functional psychoses the principal symptoms of which are primary delusions or hallucinations."

Ziehen.

Psychosen ohne Intelligenzdefect.

A. Einfache (simple) Psychosen.

1. Affective Psychosen.

(a) Manie.

(b) Melancholie.

2. Intellectuelle Psychosen.

(a) Stupidität.

(b) Paranoia.

(a) Paranoia hallucinatoria acuta s. amentia. Delirium tremens.

(b) Paranoia hallucinatoria chronica.

(c) Paranoia simplex acuta.

(d) Paranoia simplex chronica.

B. Zusammengesetzte (complex) Psychosen.

1. Aperiodische zusammengesetzte Psychosen.

(a) Secundäre hallucinatorische Paranoia.

(b) Postmanische und postmelancholische Stupidität.

(c) Postneurasthenische hypochondrische Melancholie und Paranoia.

(d) Postmelancholische hypochondrische Paranoia.

(e) Katatonie.

2. Periodische zusammengesetzte Psychosen.

(a) Periodische Manie.

(b) Periodische Melancholie.

(c) Circuläres Irresein.

(d) Periodische Paranoia.

(e) Circuläre Paranoia.

(f) Periodische impulsive Zustände.

If delusions are primary, it is paranoia simplex, and if halluci-

nations, paranoia hallucinatoria, each being divided into acute and chronic.

He agrees with Westphal and differs from Krafft-Ebing in including acute and curable cases of delirious type under paranoia and especially under paranoia hallucinatoria acuta, giving as synonyms :

Hallucinatory insanity (Fürstner) ;

Acute hallucinatory Wahnsinn (Krafft-Ebing) ;

Amentia (Meynert) ;

Hallucinoze (Wernicke).

He also describes under this head "delirium acutum" as a primary incoherent form, and alcoholic delirium tremens as a peracute variety of acute hallucinatory paranoia.

Although he says that in the typical form "Affectsstörungen" are secondary to the intellectual disorder, he allows that there are undoubted cases in which, from the beginning of the disease, either occasional or lasting exaltation or depression exists, for which no explanation can be given by the hallucinations, and *which must therefore be looked upon as primary*.

This seems to give away the whole position as to the claim for essential primary disease of intellect.

His chronic forms include cases of systematised delusions of persecution and exaltation as we know them in this country, and the "délire chronique" of Magnan.

Again, he claims that primary disorder of emotion is not found in typical cases, but allows the possibility—"Noch seltener sind primäre Affectstörungen: dauernd kommen sie nie,"—but with Krafft-Ebing he recognises that the sufferers have in early life been shy, irritable, and of "zurückgezogenen Wesen."

In the case of paranoia simplex chronica he says "primary disturbances of affect and association are present as transitory concurrent symptoms," and that exceptionally he has seen it develop in women after an emotional shock (Affektstoss).

When considering the forms of paranoia which he groups under complex psychoses he again destroys the theory of primary intellectual disorder. For instance, in describing "secundäre hallucinatorische Paranoia" he says that the melancholic or maniacal stage presents all the essential points of a typical melancholia or mania, and the second or paranoiac stage runs as a typical hallucinatory paranoia. In other words, it is

secondary to what he has considered to be primarily affective disorder. The same remark applies to (c) and (d).

His periodic and circular paranoia include either recurring cases of "acute hallucinatory paranoia" or cycles of delirium and stupor, and by most writers would not be included under paranoia.

The third German text-book which I propose to notice is that of Professor Kraepelin, of Heidelberg.

Professor Kraepelin's writings have perhaps had more influence on the world of psychiatry than those of any other living writer. In all recent American text-books he is referred to or copied from at length, but with the exception of Macpherson (*Mental Affections*)⁽¹⁾ the writers of English text-books do not refer to his views. Professor Kraepelin has always held an open mind on the question of classification, and has modified it in the various editions of his *Psychiatrie*.

He has never adopted the term "paranoia" with any satisfaction, but still retains the old word "Verrücktheit" as synonymous with chronic delusional insanity and puts "paranoia" in brackets as a secondary name.

He entirely separates acute forms from the chronic and puts acute Verwirrtheit or Meynert's amentia under Erschöpfungsirresein (insanity of exhaustion), grouping it with "collapse delirium" and chronic nervous exhaustion.

He makes no separate headings of "hallucinatory Wahn-sinn" or "secondary Verrücktheit" as Krafft-Ebing does.

In the sixth edition of his work (published in 1899) he says: "Under the name 'Paranoia' a large number of German alienists include together all those functional mental diseases in which the disorder expresses itself principally or exclusively in the domain of the intellectual faculties," the essential sign being delusions and hallucinations.

He refers to the early views of Griesinger and others as to the affective origin of this mental disorder, and to the later development of the view, that the disease is to be looked upon as a primary disorder of the understanding in contrast to disorder of feeling. He then summarises Cramer's and Ziehen's work and says: "This led of necessity to the inclusion in Verrücktheit of a number of disease pictures, which taken clinically had not the least true relationship with the original Verrücktheit, as, for

example, amentia, alcoholic delusional insanity, and numerous conditions which undoubtedly belonged to dementia præcox or 'manisch-depressive' insanity."

He holds this development to be quite erroneous and says: "The opposition, looked upon as fundamental, between disorders of the understanding and those of feeling is only a psychological one and not at all clinical. In real disease pictures (Krankheitsbilder) we see both bound up together in a quite incalculable way."

He says that as a fact attempts to regulate the "paranoia group" and separate it from other forms of insanity end always with the statement that mixed forms and transitional cases occur between it and the "affective" mental disorders.

"Therefore the only groundwork of the present paranoia idea, the artificial contrast between diseases of intellect and diseases of emotion, collapses."

Referring to the question of diagnosis and prognosis, he says "It needs no proof that the now 'universal disease' ('Universalkrankheit') paranoia, which according to many physicians includes 70 or 80 *per cent.* of the whole, does not bring us a step further in this direction."

Further he holds the idea of an "acute paranoia" to be chaotic, because thereby the essential incurability and persistent growth of developing delusions are entirely overlooked. He therefore limits the term "paranoia" to the undoubted group of cases in which there is a clearly recognised, slowly developing, and unshakable system of delusions.

He describes the cases with gradual onset of persecution developing hand in hand with exaltation, but he differs from others in saying that hallucinations are rare.

With reference to Sanders' "originäre Paranoia," he says he has rarely met it before the third decade of life.

In his sixth edition he ceased to subdivide Verrücktheit or paranoia into subordinate groups, only mentioning the "erotic" and "querulant" varieties. With regard to feeling he says: "Die Stimmung des Kranken steht mit seinen Wahnvorstellungen in innigstem Zusammenhange"; that is, the mood is in the most intimate connection with the delusions, but not therefore dependent on them.

In the sixth edition Kraepelin first described the paranoid form of dementia præcox, calling it "dementia paranoides"

and including under it the "phantastische Verrücktheit" which he formerly included under paranoia; in other words, he removed from the chronic delusional group a large number of cases in which organised and systematised delusions had developed, on the ground that the passage of the patient into early weak-mindedness rendered it necessary.

He says: The numerous delusions in the course of dementia præcox may often give rise to the diagnosis of paranoia. The greater number of the cases designated under this name by other alienists belong in my opinion to the group of cases described here and especially to the paranoid form."

In others' words, he endeavours to solve what has always been a matter of conflict, the question as to whether delusional insanity or paranoia ever ends in dementia, by removing an important group of cases into the domain of dementia.

In a paper in the *American Journal of Insanity*, January 7th, 1904, on the present status of paranoia, Dr. W. McDonald, of the Butler Hospital, Providence R. I., refers to this as follows: "We have often heard a patient referred to as an old 'paranoia' in terminal or secondary dementia, while his neighbour, perhaps an older man, and one in whom the disease has been longer evident, was spoken of as having undergone very little mental deterioration. Recently our confidence in paranoia has received a jar; the Germans have been altering classifications . . . gradually the atmosphere clears, and it is found that paranoia includes a number of patients who rightly belong to the dementia præcox group."

Referring to Kraepelin's nomenclature as used in America, he says, "We not only accept his ideas, we bolt them whole."

He finds at last that all the paranoiacs have been placed in the dementia præcox class, and raises the question, "Is there no more paranoia?" He also writes of the absurdity of speaking of a patient as having little or no mental weakness, when he is at the time misinterpreting every one of the smallest incidents of life.

Lastly, I have taken as exhibiting the French position with regard to paranoia the articles on that subject in Ballet's recently published *Traité de Pathologie Mentale*. The word "paranoia" has been disliked in France as in England, and Dr. Arnaud of Vanves, who writes the chapters on this subject in

Ballet's *Traité*, heads the chapter "Délires systématisées ou partiels," with the terms "paranoïa" and "Verrücktheit" in brackets as the German synonyms.

He gives a most comprehensive table showing the German classification, and the French equivalents, to which I call your attention.

BALLET—ARNAUD.

CLASSIFICATIONS DES DÉLIRES SYSTÉMATISÉS.

Classification Allemande.		Équivalents Français.	
Wahnsinn (Snell, Schüle).			
Verrücktheit (Sander, Westphal, Kraepelin).			
Paranoïa (Krafft-Ebing, Mendel, Morselli, Tamburini, etc.).			
Paranoïa, primitive. Wahnsinn. Verrücktheit.	Chronique.	Originelle (Originäre Verrücktheit de Sander, Westphal, Schüle).	Mégalomanie (Dagonet et Ball).
			Délire systématisé des dégénérés débiles (Magnan).
		Tardive ou acquise.	Délire de persécution à évolution systématique (type Lasègue-Falret).
			Délire chronique (Magnan).
	Aiguë.	Depressive, avec délire de persécution.	Forme typique.
			Délire querulant.
Paranoïa secondaire Paranoïa abortive ou rudimentaire (Westphal, Arndt, Morselli, Tamburini).	Chronique.	Expansive avec délire de grandeur.	Persécutés-persécuteurs raisonnants (type Falret).
			Mégalomanie. Délire systématisé religieux. Folie érotique (Ball).
	Aiguë.	Desinventeurs. Religieux Érotique.	Délires systématisés des dégénérés (Magnan).
			Délires systématisés aigus. Certains cas de confusion mentale hallucinatoire.
Paranoïa secondaire Paranoïa abortive ou rudimentaire (Westphal, Arndt, Morselli, Tamburini).	Aiguë.	à mélancolie. à manie. à paranoïa aiguë.	Délires systématisés post-malancoliques.
			Délires systématisés post-maniaques.
Paranoïa secondaire Paranoïa abortive ou rudimentaire (Westphal, Arndt, Morselli, Tamburini).	Aiguë.	Idées fixes états obsédants.	Manie chronique, démence.
			Folie du doute avec délire du toucher, agoraphobie, obsessions et impulsions diverses. Syndrômes épisodiques de la dégénérescences (Magnan).

In his own classification, which is given here, he recognises acute and chronic forms.

ARNAUD.

DÉLIRES PARTIELS OU SYSTÉMATISÉS.

*Paranoïa des Allemands.*I. *Délires systématisés aigus*—Paranoïa aiguë.

II. <i>Délires systématisés chroniques</i> — Paranoïa chronique.	1. Dépressifs.	Persécutés à évolution systématique.	Forme typique de Lasègue-Falret, et délire chronique de Magnan. Forme psycho-motrice (Séglas).
		Persécutés auto-accusateurs et persécutés mélancoliques. Délire d'auto-accusation systématisé primitif. Délire hypochondriaque systématisé.	
	2. Expansifs.	Ambitieux (mégalo manie). Religieux. Erotique.	

After a general history of the subject embodying the differences of opinion I have referred to, he defines "délires systématisés" as functional psychopathic states characterised by delusions (*idées délirantes*) permanent, fixed, methodically allied together, developing in a regular direction, and following a logical evolution. These states, "independent of any hitherto appreciable organic lesion, *appear to be equally independent of all emotional origin.*"

He very properly says, although the delusions are only manifested in certain groups of ideas, yet the mind as a whole is diseased, and is incapable of exactly appreciating and rectifying the false elements invading it.

He agrees that not only may the systematised or partial delusions be "délires primitifs," but may also appear consecutively to a mental disorder of another nature, ordinarily an access of mania or melancholia, and are then called secondary, post-maniacal, or post-melancholic (*paranoïa secondaire*).

He refers to the discords and complexity of the discussions in France, Germany, and Italy on the subject, and says: "Les auteurs employant des termes différents pour designer les mêmes choses, ou appliquant les mêmes termes à des choses différentes."

With regard to the question of the acute cases, he gives all the synonyms we have referred to, pointing out that the systematisation is ordinarily feeble, and has never the cohesion

and logical development of the chronic cases, but still holds that emotional reactions are dependent on the delirious concepts and hallucinations, and develop secondarily, contrary to what happens in mania and melancholia.

He, however, speaks of the possibility of the delirium (*délire*) being at base melancholic and depressive.

He agrees with those who hold that recoveries are often followed by relapse and passage into the chronic forms, contrary to the views of Krafft-Ebing and Magnan.

With regard to the chronic cases Arnaud adopts the French groupings, and it may be said that although he has started by a general statement as to the independence of the condition on any emotional origin, yet he frequently acknowledges that in the early stages the emotional or affective disorder is prominent, as, for example, in the group of "*persécutés auto-accusateurs*," which he says forms a link with melancholia, and in "*délire hypochondriaque systématisé*," which he says is marked early by "exaggerated preoccupation with health without constant expression of definite delusions."

Again, in the expansive groups he says there is a common groundwork in a very marked tendency to pride.

In the religious group "*ce délire atteint des sujets qui depuis l'enfance présentaient un goût marquée pour les pratiques de la religion . . . et souvent une véritable exaltation mystique*."

Again, childhood is characterised by "aptitude for religious emotions," often with genital excitability which determines a painful moral struggle with remorse. It surely cannot be thought, then, there is no primary emotional disorder in this nor in the final group of "*délire systématisé érotique*."

The confusional group is described in a different chapter by Dr. Anglade of Bordeaux, apart altogether from paranoia, to which he holds it does not belong.

In addition to Kraepelin other German authorities have of late years cast serious doubts on the conception of paranoia as a primary intellectual disorder and have refused to regard it as including forms of mental disorder of delirious or confusional type.

For instance, in the discussion on Cramer's paper in Berlin, Jastrowitz, referring to acute cases, asks what has the exhaustion—collapse—intoxication delirium to do with the different

varieties of paranoia — “Wo ist da die Analogie mit der Paranoia chronica?”

Professor Jolly, of Berlin, whose recent death we have to lament, referring to the question of primary or secondary emotion, says: “The thesis that in one case anomalies of mood are primary and lead to confusion, while in another the delusions and hallucinations appearing in confused states lead to an altered state of feeling, is a purely theoretical one.” And further: “It is most unlikely that the groundwork of any mental disorder lies in such narrow circles as pure ‘affect’ or pure disorder of idea.”

Moeli, moreover, says that although “Affecte” may play only a secondary rôle in chronic paranoia it is not shown that in early cases the emotional side is unaffected, and in the period of distrust there is not necessarily a formulated expression of persecution.

Professor Grimaldi, of Naples, in the *Annali di Neurologia*, 1903, in a critical review on “L’origine affettiva dei delirii paranoici” in German literature, refers to Cramer’s paper and the discussion on it and says that the primary intellectual origin of paranoia received then a consecration which appeared to have silenced for ever any opposite view, but that from that moment there began in Germany a descending line which by successive steps will lead to its final abandonment.

He quotes Specht as saying that the view has now fallen from the height of a dogma to the grade of a problem, and also refers to Moeli’s views which I have already quoted.

To show the change made in a short time he gives a *résumé* of the views of Professor Specht, of Erlangen, who in his paper “Ueber den pathologischen Affekt in der chronischen Paranoia” calls the primitive ideas or primary delusions of Krafft-Ebing “inventions of a very unhappy kind.” Specht refers to the discrepancy between the teaching of practice and the preconceived theoretical point of view. This is manifest when these “primary” delirious ideas are spoken of as accentuation of temperament or character, so that the vain arrive at grandeur and the diffident at persecution.

Specht finally considers “diffidence” as the primitive part of consciousness antecedent to every other morbid phenomenon, but Grimaldi goes further and thinks that earlier than diffidence there exists in paranoia a state still less evolved, which is the

instinctive feeling of fear. "Who has fear has pain in two ways, in having the fear and in having the presentiment of future pain." This induces an orientation of attention in the direction of the external surroundings and an outlook for noxious forces and actions. He sums up as follows: "It is vain to deny it; the persecuted paranoiac is above all fearful, fearful if looked at and observed, fearful if he withdraws himself, solitary and vigilant, fearful if he advances, circumspect and prudent or resolute and violent." With regard to exalted paranoiacs he says: "The pride of the paranoiac is not that of a triumphant and happy man, but unsatisfied pride, impotent vanity, threatening pride,—dispossessed prince, unrecognised king, despised and unworshipped God—he is entirely devoted to sorrow."

Dr. Linke, in a paper, "Noch einmal der Affekt der Paranoia," in the *Allgemeine Zeitschrift für Psychologie*, p. 257, 1902, refers to the fact that the question as to whether "Affekt" gives its characteristic colouring to the delusional state of paranoia is occupying an ever-increasing space in psychiatric literature, and says: "The statement that the onset of delusion in paranoia is due to a primary disease of the intellect would find few adherents to-day," and that the greater number of those who have taken up the opposite position hold that a morbid change of the Ego brought about by "primary Affekt" is the basis of the onset of delusion, a divergence of opinion only existing as to the kind of primary "Affekt."

I come now to recent English writers. Conolly Norman, in the article on systematised delusional insanity (for which he uses the synonym "paranoia") in Clifford Allbutt's *System of Medicine*, adopts what I think is the continental error with regard to the genesis of this form of mental disorder. He defines it as "that form of mental unsoundness which is specially characterised by delusion—that is, by beliefs not common to the race, which arise from the uncorrected action of the imagination, are fixed and systematised, and *are not immediately connected with a predominant emotional state.*" He contrasts this condition with acute forms of mental disease in which delusions are associated with the predominant emotional state, "*wherein they appear to take their rise, and which at the same time they reinforce.*" After describing the condition of patients

before the onset of definite delusion as being "self-centred, self-opinionated, and self-absorbed," and as "suspicious, touchy, and ego-centric," he says later on : " The delusions in the disease we are considering are rightly called primordial, for they do not appear to belong immediately to any emotional state and they strike in upon the mind of the patient as a new train of events."

He does not refer to acute "Wahnsinn" or "Verrucktheit" or "Verwirrtheit" under Paranoia.

In the article on delusional insanity to which he gives the synonyms "monomania" and "paranoia," in the recent edition of Quain's *Dictionary of Medicine*, Robert Jones adopts the following view : "Although there is less emotional disturbance in this form than in any other variety of insanity, it is incorrect to state that there is none ; for every action and every thought has a distinct fundamental feeling-tone of pleasure or pain, and the egoistic feelings which so predominate in these cases obtain such an ascendancy over the intellectual life that the personality becomes changed."

Mercier, in *Psychology, Normal and Morbid*, expresses himself very strongly as to the importance of feeling in the genesis of delusion, and I will quote shortly from his work. On page 272 he says : " In point of time alteration and exaggeration of emotion produce delusion." On page 274 : " Such a thing as a neutral delusion, a delusion which is neither pleasurable nor painful, scarcely exists, and does not exist at all as a primary state." Referring to "deluded states," he says : " There is a deluded state which is affection (= affect) pure and simple, which is pain only or pleasure only, and which includes no discernible trace of intellectual delusion." And, further : " The deluded state contains at the outset a large proportion of pleasure and pain, and may even in its early stage consist entirely of pleasure or pain ; to this affection delusion is soon added, and thereafter the proportion of affection to delusion varies much."

On page 479 he says : " I cannot recall a single instance in a long experience in which delusion has arisen, except as part of an emotion."

Sully (*The Human Mind*) is very definite on the close interaction between feeling and intellection, and referring to the views of Herbartian psychologists, and especially Dr. J. Ward,

that a presentation excites feeling and leads to desire, and so to conation, he says: "Even in the case of the higher feelings it is not uncommon to find feeling preceding representation. This applies, for example, to sudden and disturbing sense-impressions, which affect us disagreeably before they are objects of apprehension, and to worrying thoughts, *e.g.* of some omitted duty, which give us trouble before they emerge into clear consciousness. Moreover, attention to presentations, as we shall see, *appears in all cases to follow feeling*, which here assumes the form of interest, and it has been pointed out that there is no process of intellection without attention."

He further makes the very important statement, which seems to me to be very apt in relation to the condition we are considering: "It is in the rooted beliefs of the romantic dreamer, the enthusiast, and so forth, that we may best study the action of feeling in consolidating particular ideal attachments and giving them the semblance of firm, well-weighted judgments."

I think I have said enough to show that there is no common agreement as to the connotation of "paranoia" even in the country of its origin, that by some authors groups of cases are included under this term which others hold to be entirely outside it, and that the doctrine of primary intellectual disorder, apart from the element of feeling or "affect," has of late received rude shocks, and that it is tottering to its fall.

I have always taught students that in examining any case of mental disorder it is entirely erroneous to omit to examine all the functions of mind, feeling, knowing, and willing, that the mind is not divided into water-tight compartments, and that in taking the history of any case it is most important not to accept without close inquiry the account given by relatives of the mode of onset and order of appearance of symptoms.

In my opinion the separation of primary affective from primary intellectual disorders is purely artificial, and just as in mania and melancholia the affective state is not the sole factor, so in paranoia the affective side cannot be ignored.

I may sum up my own views as follows:

1. The term "paranoia" is useful if it be limited to cases of chronic delusional insanity in which there are organised and systematised delusions, whether of persecution or exaltation, and whether these run separately, concurrently, or by trans-

formation from persecution to exaltation, and whether the disorder originates in childhood and youth (originäre Paranoia) or later in life (tardive Paranoia), and whether associated with heredity or not.

2. In all these cases the importance of the affective element of mind must not be ignored, and it is erroneous to use the term "paranoia" as implying primary intellectual disorder to the exclusion of, or prior to, disorder of "Affect."

3. Allowing that there are acute cases in which delusions appear to be organised and systematised, and yet in which recovery appears to take place, many of these are merely the initial phase of chronic delusional insanity with a remission of symptoms.

4. If the incubus of the idea of primary intellectual disorder be got rid of, there is no difficulty in recognising that some cases of paranoia may begin with an acute functional mental disorder of the nature of melancholia or mania (as is indeed recognised even by those who take the primary intellectual view), or even may follow a delirious or confusional state.

5. With this exception, acute confusional insanity (acute Verwirrtheit) and acute delirious states (acute delirium, collapse-delirium, Erschöpfung-delirium) should be regarded ætiologically and clinically, and from the point of view of diagnosis and prognosis, as entirely apart from paranoia or chronic delusional insanity.

6. Mercier's term "fixed delusion" should be used for states secondary to acute forms of insanity, where the persisting delusions are not organised or progressively systematised.

7. With regard to terminal dementia in paranoia, it is trying to prove too much to say, as some authors do, that dementia does not ever supervene in this condition; and I think that Kraepelin's action in removing a large group of cases in which terminal weak-mindedness occurs from the domain of paranoia to that of dementia præcox is open to question. There seems to me a possibility that dementia præcox, with its hebephrenic, catatonic, and paranoid forms, may become the new universal disease ("Universalkrankheit"), into which large numbers of cases may be thrown, and which will give rise at no distant date to as much discussion as has attended paranoia.

(¹) The sixth edition of Clouston's *Mental Diseases* had not been published when this was written.

Dr. BLANDFORD.—Gentlemen, I rise with great pleasure to propose a vote of thanks to our President for his extremely interesting address. We can appreciate the time and labour which it has involved, and I am sure that it will be very valuable to us for perusal on future occasions. I am not going to discuss the address, and will only say I completely agree with the conclusions at which our President has arrived.

Dr. G. SAVAGE.—Gentlemen, it is my very great pleasure to second this vote of thanks to our President for his most interesting and satisfactory address. Reference was made to the fact of Dr. Blandford's and my own work not having an allusion to "paranoia." The omission on my part was due to the view I held, *viz.*, that it was an impossibility to make clear to others what was then so indefinite in my own mind.

Dr. RAYNER.—I wish to add my thanks to those which have been expressed to our President for having undertaken this Augean work, for it is nothing else. I agree with his conclusions, and we have only to look at the collection of tables he has put before us to see that "paranoia" is a possible cause of confusional insanity.

The PRESIDENT.—I beg to thank you very much, gentlemen, for the kind way in which you have received my address. I am afraid it may be looked upon more as a critical digest than as an original paper. It seems that there was considerable confusion on the subject, and I think I have shown that continental authorities are not at all agreed as to what they mean by "paranoia," and that this term should not be used as implying a primary intellectual disorder.

The Psychology of Hallucination. By W. H. B.
STODDART, M.D., M.R.C.P.

ALTHOUGH the psychology of hallucination does not enter largely into the literature of this country, it may be gathered from the writings of our English psychologists that most of them recognise in hallucinations, illusions, percepts, and ideas a family resemblance; but the points of dissimilarity among these processes have not, in my opinion, received their due measure

of consideration. I propose, therefore, to describe the ordinary psychology of these processes, drawing especial attention to their points of dissimilarity; and I will endeavour to show that, while their resemblance is mainly psychological, their difference is mainly physiological.

I will take up the subject from the very beginning. When you have an object before you—for example, a cigar—you have a percept of it; when you think of a particular cigar, you have an idea of it; when there is a pencil on the table, and it appears to you as a cigar, you have an illusion; and if you see a cigar on the table when there is nothing there, you have an hallucination.

Now, when you have a cigar in your hand, you experience sensations of pressure, warmth, brownness and, if you roll it between your finger and thumb, muscular sensations and perhaps a crackling sound. If you smoke the cigar, you may have sensations of bitterness or saltiness as well as a characteristic flavour appreciated by the sense of smell. These various sensations go to make up the percept “cigar.”

When you think of a particular cigar, have an idea of it, you think of it in terms of these, or of some of these, sensations of pressure, brownness, flavour, etc.; the sensations are in slight degree experienced. There are faint visual, olfactory, and tactile images of the cigar. Further, there may be faint visual and auditory images of the word “cigar,” as well as a muscular sensation about the mouth, similar to that experienced in saying the word, a so-called psychomotor image. Not all of these sensations will occur in any given individual; the particular sensations which contribute to his idea of the cigar depend on his ideational type.

There are three points to be noted at this stage:

First, these various sensations are not separately apprehended; they combine in the unitary idea or percept “cigar,” and it is only by psychological analysis that we have discovered that the percept or idea is constituted of sensations of various modalities.

Secondly, not all combinations of sensation will form a percept or idea; for example, the sense-qualities cold, red, high-pitched, sweet, and painful refuse to combine to form an idea.

Thirdly, perception and ideation localise an object and give it a shape occupying a certain amount of space. It follows

that our percepts and ideas are in reality but abstractions. We cannot perceive or ideate a cigar without giving it shape and placing it somewhere in space with an environment of its own; this environment is an essential part of the percept or idea. When we perceive a cigar as a "thing-in-itself," we make an abstraction from our general perception of space. The study of perception is therefore very little more than the study of the perception of space.

I will not weary you with a dissertation on space-perception, but there are some observations concerning it which I consider important to my present thesis and to which I must briefly refer. With Brewster's stereoscope, certain observations have been made which show that there is a strong tendency to combine different sensations in one idea. If two horizontal lines be placed in the stereoscope, one for each eye and one slightly above the level of the other, the two lines fuse into one midway between the levels of the original two. If, instead of the lines there are two circles, one for each eye and one slightly larger than the other, we see one circle of medium size.

This tendency to combine several sensations in one idea is constantly seen in institutions for the insane. For example, if a patient's attention happens to be directed to a bird in the airing court and at the same time he hears in hallucination a voice, he believes that the bird has spoken to him; the visual percept "bird" and the auditory percept of the spoken words combine to form one idea, or rather judgment — "the bird speaks." The tendency exemplifies what is known as the "unity of ideation."

Some further observations with the stereoscope demonstrate a tendency to place ideational content in sensory experience. If there be placed in the stereoscope (Fig. 1) four dots horizontally arranged, two for each eye, the two dots for one eye, say the right, being more separated than the two dots for the other

FIG. 1.



eye, there will appear (when such a slide is placed in the stereoscope) two dots, the right being more distant than the left. A similar effect is obtained if one dot be presented to the left eye and two dots to the right (Fig. 2). Or vertical lines may be substituted for the dots (Figs. 3 and 4).

If there be placed in the instrument a line sloping to the right for the left eye, and a line sloping to the left for the right eye, we see a vertical line, the upper end being nearer than the lower ; the line slopes towards the observer (Fig. 5).

Fig. 2.



The above observations demonstrate a tendency on the part of the organism to attach *ideational content* to these groupings of sensation. The conditions of the first diagram are obtained when two marbles are placed horizontally in front of the eyes in such a way that the right marble is more distant than the

FIG. 3.



FIG. 4.



left ; the marbles appear when viewed with the left eye to be closer together than when viewed with the right. In Fig. 2 the near marble hides the distant one from the left eye. The same conditions are obtained when two sticks are placed

FIG. 5.



vertically in the ground in positions similar to those of the marbles.

The conditions of the tilted line of Fig. 5 are obtained when a pointer, such as the one I hold, is placed in front of and tilted towards the observer. To your left eye it appears to lean to the right, and to your right eye to lean to the left.

In Fig. 6 the small circle appears nearer than the large one, and in Fig. 7 the large circle appears to be the nearer. In

FIG. 6.

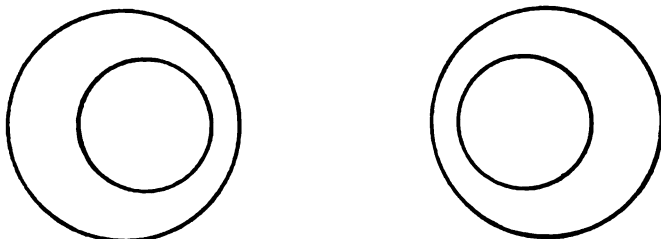
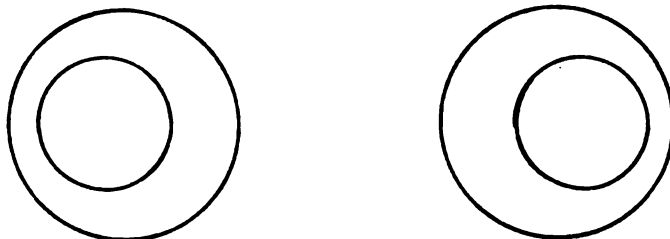


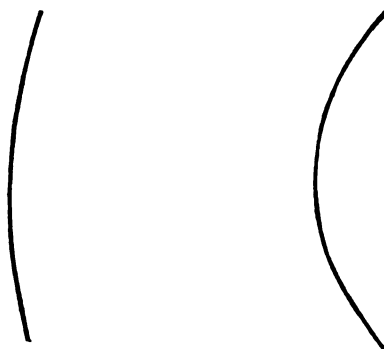
Fig. 8 the middle of the curve appears nearer than the two ends.

FIG. 7.



Figs. 6 and 7 are presumably assimilated to truncated cones; in Fig 6 the cone is solid and viewed from above, in Fig. 7 it is

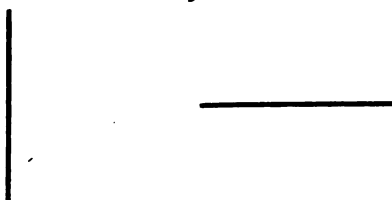
FIG. 8.



hollow and viewed from below. Fig. 8 is perhaps assimilated to a croquet hoop viewed from above and to the right.

If a stereoscopic slide be so constructed that the images presented to the two eyes are such as, in our perceptual experience of the external world, never occur together in such relationship, they refuse to combine, because it is impossible to place ideational content in them: for example, if (Fig. 9) a vertical line be presented to the left eye and a horizontal line to the right, the images do not combine to form a cross, but one of the lines crosses the other and obliterates it about the point of intersection.

FIG. 9.



If M be given for the left eye and W for the right (Fig. 10), a most puzzling result is obtained. Far from giving an unitary percept, the parts of the letters keep chasing each other out of the field. These are examples of "ideational rivalry."

The tendency to attach ideational content to images is further illustrated by some geometrical illusions. The angles of perceptual experience are, for the most part, right angles; there is consequently a tendency to assimilate all angles to right angles, and hence to over-estimate acute and to under-estimate obtuse angles.

When looked at with one eye so as to eliminate the true idea

FIG. 10.



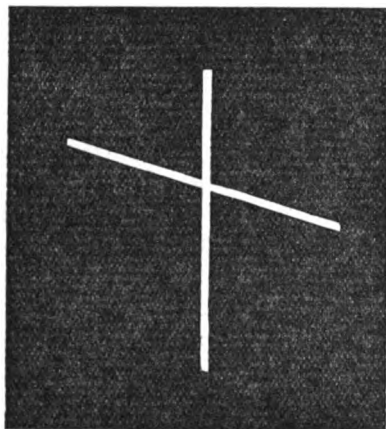
of depth gained by binocular vision, Fig. 11 appears as a vertical line in the plane of the paper crossed at right angles by a horizontal line passing through the plane of the paper, especially if an extremity of the latter line be fixated. The figure is assimilated possibly to a telegraph post crossed by a wire.

I give but one more illusion to illustrate this principle. If an after-image be obtained of a right-angled cross placed horizontally in front of the eye, the shape of the after-image is changed when the eyes are turned upwards and to the right or

left, or downwards and to the right or left, as shown in Fig. 12. The explanation of this illusion depends on the perspective of a right-angled cross.

If such a cross be situated in each of the four corners of the

FIG. 11.



visual field, the perspective is that represented in Fig. 13. Now, "the brain" has nothing to do with after-images: it simply endows with ideational content the sensations which it ex-

FIG. 12.



After-images of a right-angled cross.

FIG. 13.

Perspective of a right-angled cross.

periences; and "the brain's" experience is that a line, in any of the four corners of the field of vision, which projects a horizontal image on the retina, is not really horizontal but tilted

away from the centre, as in the after-image diagram : hence the so-called "torsion" in the after-image of a right-angled cross.

For convenience, I continue to limit considerations to the domain of vision. Although visual images are aroused by stimulation of the retina, they are localised not necessarily in the neighbourhood of the eye, but referred to some situation in our environment. This fact has been magnified by some psychologists into a special faculty of mind, "eccentric projection," whereby our mental states are, as it were, thrown outwards into the world of experience ; and it has been minimised by others, who say that visual sensations are not associated with eye sensations. In whatever way we regard this mental state, there is no doubt that we have a *something-there* feeling superadded to the crude sensations and that we place ideational content in them.

At the risk of repeating facts familiar to you all I have dwelt at some length with the phenomena of perception, because there is practically no psychological difference between perception, ideation, illusion, and hallucination. Still limiting consideration to the domain of vision, in each of the above processes, the angular gyrus is physically stimulated by the mediation of some tract of fibres (psychologically it matters not by what tract of fibres), and an image (a cigar-image, to keep to the original illustration) is simultaneously projected in the external world.

It therefore follows that the differences between perception, ideation, illusion, and hallucination are to be sought among the physical bases of these processes. The most obvious difference is that while in perception and illusion there is a stimulus to the peripheral end-organ (retina in the illustration I have adopted), in ideation and hallucination there is no such stimulus ; in perception and illusion the stimulus to the angular gyrus arrives by way of the optic radiations, occipital lobe and occipito-angular association-fibres ; but, in the case of ideation and hallucination, the stimulus reaches it by way of other association-fibres than the occipito-angular bundle. Confirmation of this proposition is afforded by the existence of visual hallucinations in the blind, auditory hallucinations in the deaf, etc.

Now, when a patient has an hallucination of vision there is a negative as well as a positive side to the process. The

positive side is that he sees the hallucination image; the negative is that he does not see objects in the neighbourhood of the image.⁽¹⁾

The obvious interpretation of the negative part of the process is that the neurons which normally conduct sensations from the retina to the angular gyrus are dissociated from one another (*perhaps* by the retraction of gemmules); but the same effect may be produced by the patient closing his eyes. Acute maniacs frequently keep their eyelids closed in order to encourage the formation of pleasant visions: in such cases, the dissociation factor is presumably wanting and has to be artificially supplied by the patient. Similarly, acute maniacs frequently keep their hands over their ears in order to favour pleasant auditory hallucinations: but, as you are aware, this is unnecessary in most cases. I have known two patients with whom auditory hallucinations were unceasingly present and to each of whom it was necessary for me to shout in order to make the patient hear my voice. Both these patients recovered and were not deaf when the hallucinations ceased.

As already stated, the positive side of the hallucination process is due to stimuli reaching the centre by way of association-fibres other than those by which sensations are transmitted from the peripheral sense-organ.

The hallucinated state is also favoured by the absence of sensations of other modalities than that affected. For this reason, hallucinations are most frequent during the darkness and silence of the night when small stimuli by way of association-fibres do not pass unheeded, but induce a physical state with which a correlative *something-there* psychical process occurs. The absence of other stimuli allows the affected sensory area to dominate consciousness. This principle is illustrated by the case of a lady who told me that during the delirium of typhoid she was afraid to close her eyes because, when she did so, she heard in hallucination horrible sounds proceeding from a discordant brass band: this occurred during the night. During the day the music was pleasant, and she would close her eyes in order to hear it. In this case, visual stimuli were sufficient to inhibit the auditory hallucination.

Hallucination, then, depends upon two factors, diminution of sensation and disturbance of association. These factors vary inversely in the several conditions in which hallucination

occurs; for example, in the delirium of fever and in the excited stage of acute mania there is little diminution of sensation and great disturbance of association; in cases of nitrous oxide or chloroform inhalation there is little disturbance of association and great diminution of sensation.

Dr. Head has recorded cases in which hallucination was associated with the pain of visceral disease. I have no experience of such cases, but I presume that there was no diminution of sensation in Dr. Head's patients. I therefore suggest that in such patients the hallucinated state depends upon disturbance of association, that the continued painful sensations spread by way of association-fibres to distant sensory areas of the cortex, and so give rise to visual, auditory, and other hallucinations.

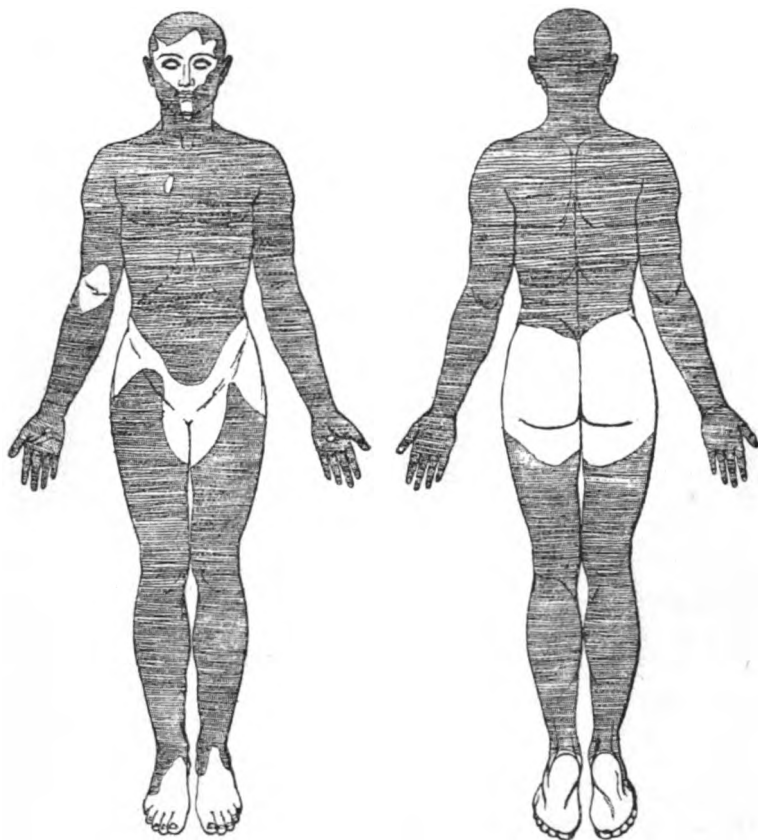
An hallucination to which I must make special reference is that known as the epigastric sensation. This is usually described by the patient as a sinking feeling about the epigastrium, but it may be a feeling of fulness or even of pain. I believe that many patients suffering from these sensations are erroneously treated for indigestion. Such sensations occur not always in the epigastrium, but sometimes in the umbilical region, in the hypogastrium, or even in the external genitalia. They are occasionally referred to the chest (sternal region), and probably such symptoms as "globus hystericus," "neurotic spine," "hysterical hip," and "hysterical shoulder" are of the same nature.

Such feelings appear to be more common than any other variety of hallucination. At Bethlem Hospital I recently took a census with regard to this point, and found that sixty-three of the two hundred and forty patients suffered or had suffered from such hallucinations, and of the remainder about twenty-five were unable to make reliable statements about the matter. Cases were excluded in which the sensation was due to indigestion or to constipation.

Now anæsthesia peculiar to the insane, has, as I demonstrated some five years ago, a characteristic distribution. You will be reminded of it by the following charts; they were obtained by mapping out on patients the areas insensitive to a pin-prick. Although I have reason to believe that insensibility to touch invariably accompanies insensibility to pain in these cases, I have found it necessary to use analgesia as my

criterion, because it is difficult to secure active attention in severe cases of mental disease. Further, many patients are unable to give verbal information about their sensations, in which case information must be obtained by noting the patient's gesture; tactile stimuli does not provoke gesture.

FIG. 14.



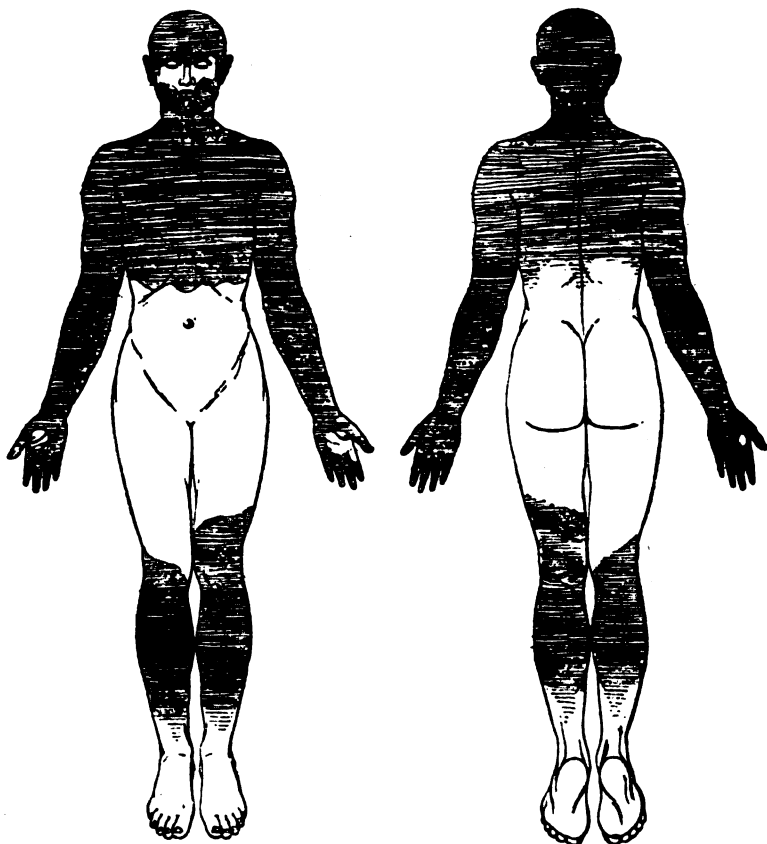
In this and the following diagrams the shaded parts represent areas of loss of sensation.

Fig. 14 is a chart of one of my Prestwich cases, a woman *æt.* 50, with melancholia of five months' duration, who came to me one morning, saying, "Doctor, something has gone very wrong with me in the night." She complained of a sinking sensation in the lower part of the abdomen, and I found that she had the anæsthesia figured in the diagram. Not the least

remarkable fact about the case was that the anæsthesia entirely disappeared in three days.

Fig. 15 is also from a female melancholiac, but her anæsthesia was more persistent. She was æt. 40, and also complained of abdominal uneasiness throughout her illness.

FIG. 15.



She had swallowed several pins, but I attach no importance to this fact; many patients swallow pins and appear to be none the worse.

Fig. 16 is from the case of a girl, æt. 18, in the *stadium debilitatis* of acute mania. She complained of a sinking sensation in the sternal region.

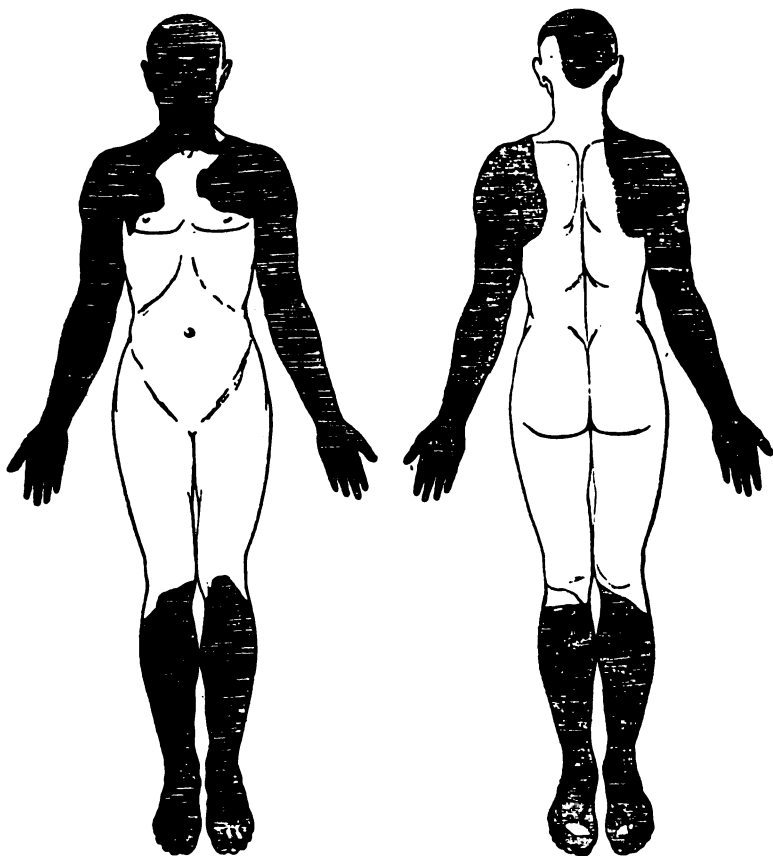
Fig. 17 is from a man, æt. 35, in a prolonged *stadium*

debilitatis following acute delirious mania. When his anæsthesia was charted he was complaining of pain in the left shoulder.

Fig. 18 is from the case of a woman, æt. 44, who suffered from the epigastric sensation and from hallucinations of vision.

All these patients, and many more who might be included,

FIG. 16.

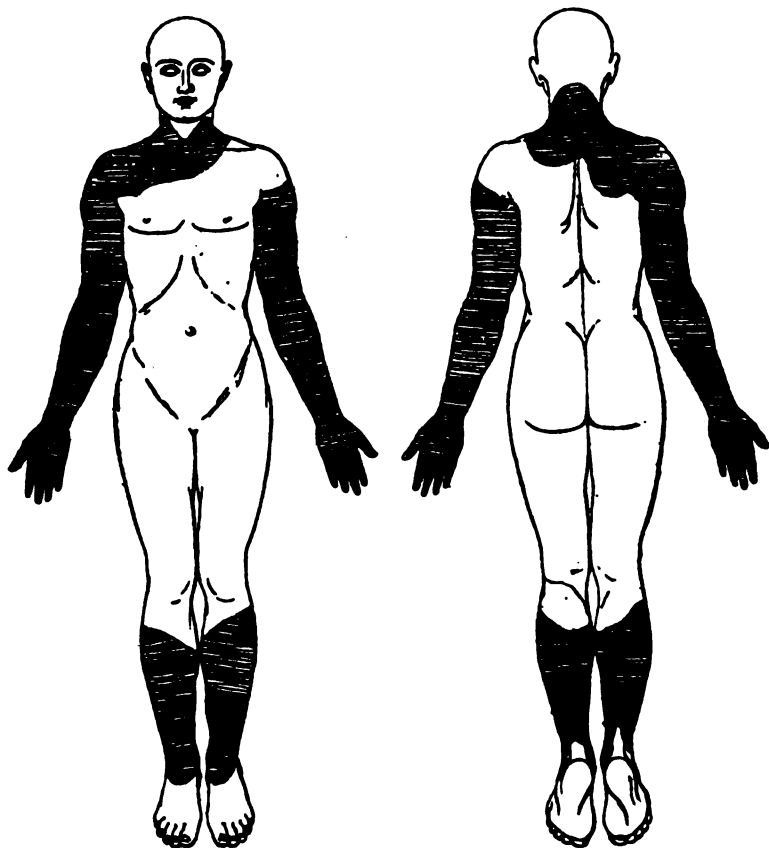


suffered from the epigastric sensation or from some allied type of hallucination; and it is invariable that patients presenting the above type of anæsthesia, when interrogated as to the presence of such sensation, answer, when able, in the affirmative; and its existence may be inferred in the remainder. Conversely, many patients having epigastric sensation tell us, on examination, that they do not feel a pinprick on the hand

so well as on the trunk. I therefore go farther and suggest that all patients having the epigastric sensation have more or less extensive peripheral anæsthesia, in some cases to a very slight degree, occasionally indeed so slight as to elude detection.

One patient, whose symptoms suggested such a view, was a

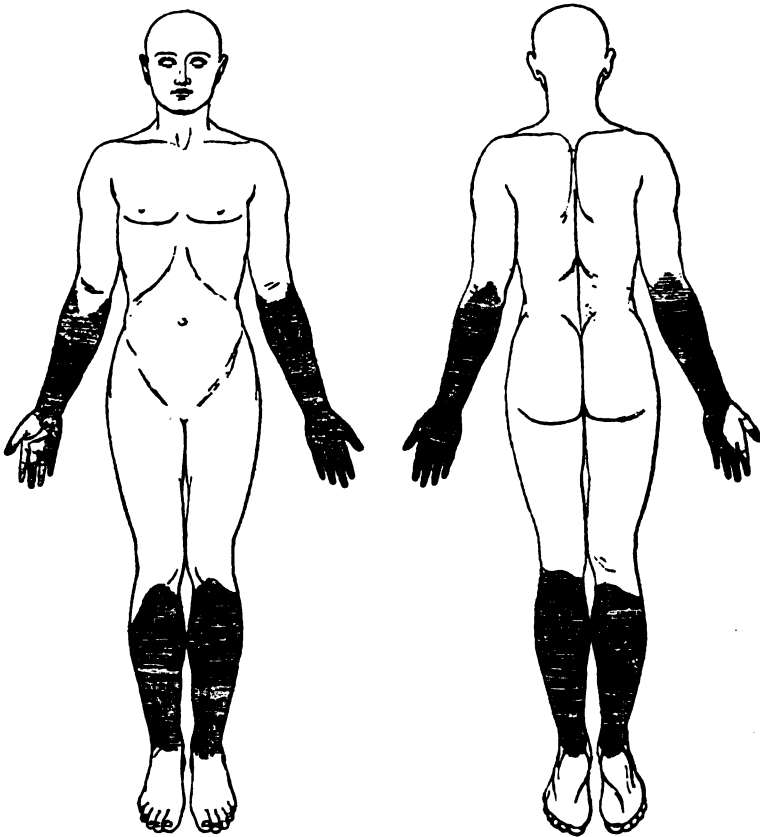
FIG. 17.



hypochondriac, who complained simultaneously of a "burning sensation" in the hypogastrium and of "loss of feeling" in the legs, but I was unable to detect by examination any objective loss of sensation in the legs. The conclusion is that epigastric and allied sensations arise in those cases in which, owing to some affection of the cerebral cortex, there is some loss of sensation in the peripheral parts of the organism.

The above data accordingly suggest the origin of epigastric and allied sensations. Consciousness is entirely derived from sensation, for in the absence of sensation consciousness does not exist. When, therefore, any part of the body becomes anæsthetic, consciousness is dependent on the sensitive remainder. In the patients now under consideration consciousness is

FIG. 18.



unusually dependent upon sensations derived from the region of the abdomen; other parts of the organism are more or less anæsthetic, and contribute little or no sensation to the content of consciousness. The abdomen and neighbouring parts thus demand a relatively large amount of the patient's attention and become the seat of abnormal sensations. They "have greatness thrust upon them."

This was well illustrated by the case of a girl in the *stadium debilitatis* of acute mania. As usual in this condition, there was extensive anæsthesia of the type which I have described; as a result the sensitive remainder dominated consciousness and the patient took to masturbation. (The habit, being started, persisted after the anæsthesia had disappeared.)

The principle which I am submitting is further illustrated by the epigastric aura of epilepsy. The first symptom of an epileptic fit is loss of consciousness; in consequence of this the patient falls. It is commonly said that he loses all sensation because he is unconscious. This does not represent the true state of affairs; the truth is that the patient is unconscious because he has lost all sensation: and I suggest that the loss of sensation begins at the periphery (arms and legs), and allows the epigastrium to dominate consciousness; hence the aura. I submit that the last event, as the patient falls, is loss of sensation in the abdomen. The principle which I have been enunciating is but a special instance of the hallucinated state being favoured by the absence of other sensations than those contributing to the hallucination.

By way of recapitulation consider the condition of an epileptic with that common visual aura, people circling round him from left to right in the room above his head. The patient is progressing towards complete loss of consciousness, otherwise complete loss of sensation. I submit that, during the aura, loss of sensation, the negative factor of hallucination, has already set in; the ceiling of the room in which the patient stands is no longer seen; and further, there is diminution of sensation of other modalities. The positive factor, disturbance of association, is demonstrated by the fact that he *sees* people circling round him in the room above.

The neural interpretation of these phenomena is that there is dissociation of neurons between the retina and angular gyrus; this prevents the patient from gaining a view of the ceiling above him. On the other hand, association is unusually active between the angular gyrus and other parts of the cortex cerebri, possibly on account of some irritating body within the neurons. The angular gyrus being thus stimulated, ideational content is attached to the sensation, and a visual image is projected of people circling round the patient's head.

In conclusion, gentlemen, I again ask you to compare per-

ception, ideation, illusion, and hallucination, having regard to the manner in which the cortical centre is stimulated in each process.

In perception, stimulus is transmitted from the periphery ; there is neither *transcortical* association (to use Tanzi's word) nor peripheral dissociation.

In ideation, the centre is stimulated by way of association-fibres ; but, again, there is no dissociation from the periphery. Observe, however, that peripheral association (non-dissociation) plays no part in ideation. The fact that I see a table plays no part in the projection of a faint cigar-image on the table : the idea is the result of stimulation of the angular gyrus by way of association-fibres.

In illusion, the centre is stimulated on the one hand by way of association-fibres, and on the other from the periphery ; and the tendency to ideational unity combines the sensations aroused by the two sets of stimuli. Observe that the physiological difference between ideation and illusion is this, that the peripheral stimulus *does not interfere with* ideation, but that it is *necessary to* illusion.

In hallucination, as we have seen, there is transcortical association *and* peripheral dissociation. It will therefore be noted that the essential factor of hallucination is its negative factor. This is its essential difference from perception, ideation, and illusion.

There is no psychological difference between these processes. Physical stimulation of the ideational centre gives a *something-there* feeling, and ideational content in the *something-there* necessarily follows.

The psychological identity of these processes may become more obvious if I suggest a transitional state from ideation to hallucination. If, on a sleepless night, you try to induce the hypnagogic state by the classical device of watching sheep jump over a gate, transcortical association common to ideas and hallucinations supervenes. The closed eyes, the darkness, the silence supply a negative factor, and the sheep are more vivid than with the eyes open in the light of day ; and as you fall asleep, as you lose sensation, they gradually assume the vividness of hallucination.

(¹) It must not be supposed that it is an easy matter to elicit this negative fact from patients. When questioned on this point, their answers are usually so

evasive that it is almost impossible to determine what they see and what they do not see, and it was only after some eighteen months' fairly constant investigation of this point that I finally became convinced of the negative side of the hallucinatory process.

DISCUSSION

At the Annual Meeting in London, July 22nd, 1904.

THE PRESIDENT.—We have to thank Dr. Stoddart for this interesting paper on the psychology of hallucinations. It is a very difficult subject, and any work on it is most useful to the Association.

DR. EDRIDGE GREEN.—I regard Dr. Stoddart's paper as of very great value. About fifteen years ago I made very similar experiments myself, with the object of proving that it was not necessary for images to fall on corresponding points of the retina to produce a combined effect, and the experiments which Dr. Stoddart has shown with the stereoscope bring this out most clearly and absolutely. I communicated a paper to the Royal Society on this subject, but the opposition I met with from physiologists, who insisted that the images must fall on corresponding points, led me to withdraw the paper. However, I am very glad to find it has been brought up again in such an extremely effective and absolutely convincing manner.

DR. ROBERT JONES.—If it has taken Dr. Stoddart eighteen months to understand one part of his own paper, it will occupy me far more to take the whole paper in. I would corroborate what Dr. Edridge Green has said, that it is a very valuable paper, for up till now the pure pathologist has done nothing to elucidate hallucinations. It struck me that if we were able to educate several of our patients as to the exact physiology of their various hallucinations, we might be able to convince them of their error. I do not suggest we could do so with a large majority. We know, among our own patients, those whom it is absolutely impossible to convince as to the unreality of their hallucinations. Innumerable instances of this might be recorded, but I have been able to convince some patients of the hallucinatory character of their delusions; and in one notable instance a person was able to go and complete his term of service in a Government office; he was able to reason as to these and became convinced of their character as hallucinations. He relapsed, but he had been able to stay sufficiently long to get his pension, which was a very important matter for himself as well as for his family. Dr. Stoddart—if I have rightly interpreted his statements—said that the prominence given to hallucinations depends very much on the diminution of other sensations; and the converse carries some suggestion with regard to the special treatment of the insane. More especially does this aspect of it touch me, who am responsible for the management of a very large asylum, and repeatedly I experience qualms of conscience that there are a large number of patients who proceed to absolute chronicity or dementia in these large asylums, because one is unable to get at them individually. But if one were able to combat this diminution of sensation by rousing them through stimuli applied to the various sense organs, give them employment, and get at them, so to speak, by various forms of excitement, Turkish baths and so forth, as is more possible in the smaller asylums where there are fewer patients, and therefore greater possibilities of individual stimulation, these patients might perhaps be stimulated to recovery. I shall look forward to a later opportunity of going further into Dr. Stoddart's paper, as there is so much in it that I cannot do justice to on this occasion.

DR. YELLOWLEES.—Dr. Stoddart, in this admirable paper, has directed attention practically, by these weird figures, to the loss of sensation so common with hallucinations. This recalled to me a patient whom I saw at the request of Sir William Gairdner, who had absolutely no surface sensation anywhere, not the least, but who was without hallucinations or delusions, and indeed mentally as well as any of us.

DR. STODDART.—I thank you for the kind way in which you have received my paper. With regard to Dr. Edridge Green's remarks, I must disclaim originality on my part for most of these stereograms. Some of them were drawn attention to by Wundt some ten or twelve years ago, and Professor Titchener has added very largely to them of late. I think they conclusively prove that it is unnecessary

for images to fall on corresponding points of the retina for them to form a single image. Ideational content plays a very important part in this connection, and if, in one of those ideational-rivalry diagrams, you give two different percepts—one for each eye—and put them in such a position that it is impossible for them to form a unitary idea, they will not combine; but in figures of this kind it is not necessary for them to fall upon corresponding points of the retina to give an unitary idea. With regard to Dr. Jones's remarks about educating patients to understand their hallucinations, that is very difficult indeed; I have often tried. There was one patient especially whom I used to try to get to understand that experiment of Dr. Hack Tuke's that if, by pressing upon one eyeball, you can double an image it is not an hallucination. I tried it with this patient, who was very intelligent; and I tried to teach her that during the daytime images would be doubled by pressing on the eye. I told her to do so when an hallucination appeared. Whenever an hallucination appeared, however, she was too frightened. You cannot get patients to do it. As a matter of fact, a psychological experiment often comes in as a means of treating patients. I remember one lady who fell in love with some doctor at the Royal Ophthalmic Hospital, Moorfields. She never thought of him for about a year from the time she attended for her eyes, until indeed she began to go insane. Then she used to hear his voice and see him every morning when she woke up. I told her it would be permissible for her to listen to the voice with her fingers in her ears, and watch him with her eyes closed. She did this and the voice of the man went at once, and it never recurred. But some weeks later, she began to hear the voice of God, and I did not know how to get over that difficulty. I thank Dr. Yellowlees for his remarks. Cases have been pointed out to me which were said to have no sensation whatever; but on closer examination I have found that there is generally a little sensation in the feet and a little about the pelvis, just small areas. I have seen two or three cases of that kind. One I saw recently was an epileptic subject, in whom it was said that there was no place where he could feel. On investigation I found he had small sensitive spots. But the most interesting point about the case was that he had allocheiria; that is to say, on putting a pin into one of these spots he immediately put his hand to the opposite side. On putting a pin into one foot he put his hand on to the opposite foot. I should like to know if any member of the association has come across allocheiria associated with cerebral conditions. Of course in spinal conditions, such as tabes, it is extremely common, but this is the only patient I have had in whom allocheiria has been associated with a cerebral condition.

Histological Studies on the Localisation of Cerebral Function. (¹) By ALFRED W. CAMPBELL, M.D.

AT the Annual Meeting of this Association held at Liverpool two years ago I had the pleasure of giving an account of the work which I was then doing, on the medullated nerve-fibres of the cortex cerebri, and I endeavoured to demonstrate that a comprehensive study of the form and arrangement of these constituents in the normal adult condition afforded a useful guide to precise localisation of function.

Since then the investigation has been extended in several directions. Other brains have been converted into serial

sections and territorial variations in cell lamination worked out as minutely and exhaustively as were those of the nerve-fibres ; points bearing on the localisation of function, suggested by the normal arrangement of cortical elements, have been amplified and confirmed by the histological inspection of a large amount of pathological material (the brains of cases of amyotrophic lateral sclerosis, of amputation of extremities and of deprivation of the special senses) ; and lastly, a comparative examination of the cortex of two members of the anthropoid ape family and of several of the lower animals has been effected. The gross assets of the research are the furtherment of the direct correlation existing between physiological function and histological structure, a clearer understanding of many cerebral homologies and a survey of the brain surface more complete than any which has been attempted hitherto, and one giving the exact distribution of various functional areas previously ill defined.

Viewed collectively, the human brain harbours two varieties of centres, controlling what we may call "primary" and "higher evolutionary" functions respectively ; the former are those common to all animals and essential to survival, *viz.* centres for movement and common and special sensation ; the latter are those complex psychic functions in the possession of which man rises superior to all other beings.

Now since it will be impossible in the time at my disposal to discuss all these centres satisfactorily, and knowing that any evidence which will throw light on the localisation of the higher functions will be of interest to the members of this association, I propose to devote most of my remarks to-day to the parts supposed to govern these functions, the frontal and parietal lobes, and only to touch lightly on the localisation of the primary centres.

We will start with the motor area, as this will lead us on to the frontal lobe. One has shown that this area is as easy to define on the histological bench as on the table of the experimenter, that it is mainly characterised by the giant cells of Betz, and that it is confined to the precentral and does not spread, as has been supposed, to the post-central gyrus. Proof, from the pathological side, of the correctness of this localisation has been supplied by an examination of the brains of cases of amyotrophic lateral sclerosis. Amyotrophic lateral sclerosis is a perfect example of a malady limited in its affection to the

muscles and the motor system of neurones; and on making serial sections of the central gyri in two typical instances, it was extremely instructive to find profound changes confined absolutely to our "precentral or motor area" and consisting essentially of a destruction of the cells of Betz.

Then the brains of individuals who have been disabled by amputation of one or other extremity have afforded material for further differentiation within the area. I have made serial sections of the central gyri in seven cases, and in all have discovered changes in the giant cells identical with those found by Marinesco in the spinal cord after experimental section of spinal motor nerves, and described by him under the name "*réaction à distance*."

In *carnivoræ* and other lower animals, cortex can be recognised almost identical in structure with the motor cortex of man and the man-like ape, and an analysis of its distribution sheds light on several debated fissural homologies. Perhaps one's most important finding is that the sulcus cruciatus of lower orders does not appear to be the homologue of the fissure of Rolando, and the chief objection to this commonly accepted homology is that the sulcus cruciatus invariably lies more or less in the midst of the motor area, whereas the fissure of Rolando is essentially a boundary. Searching for a sulcus which will correspond more with the fissure of Rolando (at any rate, the upper part), we find an isolated fissure on the posterior limb of the sigmoid gyrus, sometimes referred to as the "*compensatory ansate*" fissure; and as this is present in other orders besides *Canidae* and *Felidæ*, and as, like Rolando, it forms a sharp histological limit between motor and what I take to be common sensory cortex, I prefer to regard it and not the sulcus cruciatus as the Rolandic homologue. In man, the chimpanzee, and the orang a fissure situated on the oval or paracentral lobule, immediately in front of the upper extremity of Rolando and invariably harbouring Betz cells in its walls, seems to be the equivalent of the sulcus cruciatus. (This fissure may be seen in the drawing of the mesial surface, lying within the precentral area.)

I have referred in loose terms to the field just described as the "motor area," but this question of function must be considered more carefully. From Dr. Hughlings Jackson we have the suggestion that movement is represented at three different

levels—firstly, in the anterior cornual cells of the spinal cord, these being simple movements ; secondly, in the giant cells of the precentral gyrus, these being more complex movements ; and thirdly, in other parts of the frontal lobe, these being most complex movements. This thesis histology seems to favour, and from a thorough study of the field in different animals and different conditions I am inclined to believe that the area of cortex we have just described, the motor area of Sherrington and Grünbaum, is designed for the execution of simple primary or automatic movements—for instance, the movements of progression. I cannot enter into this question fully here, but one most significant fact of histology is that in the human brain the supply of giant cells is far greater in the leg than in the arm area, while in quadrupeds, on the contrary, the supply seems to be approximately equal in the respective fields.

If, then, simple, primary, automatic movements are represented in our precentral area, where are those which we call skilled or higher evolutionary movements represented ? In an immediately adjoining zone on the frontal side, which I have called “intermediate precentral.” Looking carefully at the distribution of this area, it may be observed that it embraces two important centres for movements of essentially skilled type—the area of Broca for speech, and the cheirokinæsthetic centre for writing ; and a further conclusion I have formed is that this “intermediate precentral” strip of cortex harbours a sequence of centres for the control of skilled movements following the same order, deposited more or less on the same horizontal level, and connected by commissural fibres with the series of “primary” centres occupying the “precentral” area. And though it may appear to be against my contention that opposite the “primary” leg area the field in question is broad, while skilled movements of the leg are few, I would point out that those movements are only in abeyance ; they are potential and capable of development, and as witness of this take the case of “armless wonders,” whose toes and feet are educated to perform with as much skill as are our hands and fingers.

Other points of interest about this “intermediate precentral” area are that its anterior boundary coincides remarkably closely with that of the old “motor” area as defined by Ferrier, Beevor, and Horsley, etc. ; also, in regard to the same limit, it agrees almost precisely with Flechsig’s great central projection sphere.

Passing on to the remainder of the frontal lobe, structurally its investing cortex is divisible into two areas, which I have called "frontal" and "pre-frontal"; and although the line of demarcation between these is not abrupt, it may be found on proceeding from behind forwards that there occurs a step-like numerical and volumetrical reduction in the cells and fibres, and a reduction which reaches such a degree in the "pre-frontal" area that I am in the habit of referring to it as showing an extreme of fibre poverty and cell weakness.

As nothing is to be gained by discussing the numerous views put forward by workers in other departments on the functions of the frontal lobe, I shall just briefly mention the points suggested by the histology of the part.

In the first place, concerning the pre-frontal subdivision, I have just stated that it is extremely weak structurally; add to this the experience of the physiologist, that it is the only part of the whole brain which is absolutely irresponsive to electrical excitation, and likewise that of the clinician and experimenter, that its destruction is followed by no noticeable permanent effect, and I think it will be agreed that it cannot possess great functional importance. For my part I think that histology brings proof of what was previously only surmise—that it is the very last pallium to appear in the progress of phylogenesis. I would submit that it is a part with a future, but that at present its evolution is incomplete.

Histological investigation, of course, does not help us in determining whether or not the frontal lobe is the seat of higher psychic functions or their nature; however, the collateral examination of this lobe in man and the anthropoid ape reveals another significant point: it is that the cortex which I have labelled "frontal" is more extensive in the human being than in the ape.

One more point: it is argued in certain quarters in accordance with Flechsig's doctrine that the frontal lobe must be a higher association centre because it is a part which along with certain others shows most atrophy in cases of dementia, particularly the dementia of general paralysis; but this is evidence which we must accept with the greatest caution. On the validity of Flechsig's doctrine I would express no opinion, but I would indicate that there are simple physical reasons to explain why the cortex of the frontal lobes specially shows

changes to the naked eye in the course of cerebral wasting ; it is that it is built up on an extremely weak and collapsible framework of nerve-fibres. The central gyri, the occipital lobe, and other parts do not present this naked-eye change because they, on the contrary, are built on a stout framework.

Turning now to the cortex of the parietal lobe, let me repeat that I believe it is a mistake to suppose that the motor function is represented behind the fissure of Rolando, and judging from the profound structural differences between the ascending frontal and ascending parietal gyri, it is remarkable that the difference in function has not been previously advanced beyond the stage of suspicion. Even with the naked eye the cortex of the ascending frontal gyrus may be seen to be much deeper and the projection of white substance on which it rests plumper and more voluminous than that of the ascending parietal, and there are numerous microscopic distinctions which I am detailing elsewhere. And in regard to function I may state without wasting words that I have plumped for the view that the post-central or ascending parietal gyrus is the main terminus for common sensory impressions. These are my reasons : First, it is now being admitted by those who have studied the developing myelin that the fibres pertaining to this gyrus, like sensory fibres in the spinal cord, acquire their medullated sheath at a relatively early period ; secondly, some of those who have worked at secondary degenerations trace the "cortical lemniscus"—that is, the cerebral continuation of the main sensory system of fibres—to the gyrus in question ; and, thirdly, I myself have obtained some evidence from an examination of the brain in cases of *tabes dorsalis*, which, in my opinion, is more conclusive than any yet adduced. In pure cases of *tabes* we have an affection as closely restricted to the sensory neurones as amyotrophic lateral sclerosis is to the motor ; and in three cases I have succeeded in demonstrating profound changes, consisting chiefly of destruction of the large pyramidal elements accompanied by a general disturbance of the cell lamination ; and what is more important, these changes are limited in the most convincing manner to the ascending parietal cortex, particularly that on the rolandic wall.

Concerning that part of the parietal cortex which adjoins my "post-central" area, clinical evidence is gradually accumulating to the effect that lesions thereabouts give rise to isolated

disturbances of the higher components in common sensation—for instance, astereognosis and loss of the muscle sense ; and I incline to the belief that the area for common sensation, like the motor area, will ultimately be divided into different levels or centres. I would submit that the “post-central area” proper may be a primary centre, one serving for the recognition of the simplest components in common sensation ; such are impressions of heat and pain ; while parts behind, including the “intermediate post-central area” may constitute a higher centre and deal with more complex components, such as the recognition and orientation of cutaneous pressure and the appreciation of the position and condition of our muscles—components all of which involve a psychic process.

But between this “sensory” area in front and the visual area behind there still remains for consideration a large tract of cortex of which the structure is unspecialised and the function obscure. The field embraces the great posterior association area of Flechsig, and it is a matter for future settlement what part it plays in the conduct of higher psychic processes. Personally I am not prepared to argue on this question, and will merely indicate some points of interest which occur to the anatomist and histologist. As the act of consciousness is built up on the interpretation of sensory impressions, and we have classical illustrations of the fact that individuals deprived at birth of sensation are of necessity aments, it is significant that this great parieto-temporal area is placed in close anatomical connection with all the great sensory centres ; thus immediately in front we have common sensation ; immediately behind, vision ; immediately below, hearing ; and on the inner surface, by means of the limbic lobe and cingulum, it is brought into association with the sense of smell ; and this simple fact of anatomy seems to favour the idea that the field under consideration may serve for the further elaboration and interpretation of impressions primarily received by the various sensory areas.

In the second place, although Hitzig was perfectly right in saying that in the animal series the growth of the intellect proceeded *pari passu* with the development of the frontal lobe, it might just as truly be said that it bears a like ratio to the development of the parietal lobe. Thus, in the pig, an animal very low down in the series, there is practically no parietal

cortex ; the areas for vision and common sensation lie in close approximation ; in the dog, considerably higher in the series, and with a commencing fissure of Rolando, vision and sensation are separated by an appreciable interval, and in primates the gap widens still further.⁽⁸⁾ Therefore, whether our parietal lobes share with our frontal convolutions the conduct of high psychic processes or not, there is no doubt that both undergo equal expansion in the progress of phylogenic development.

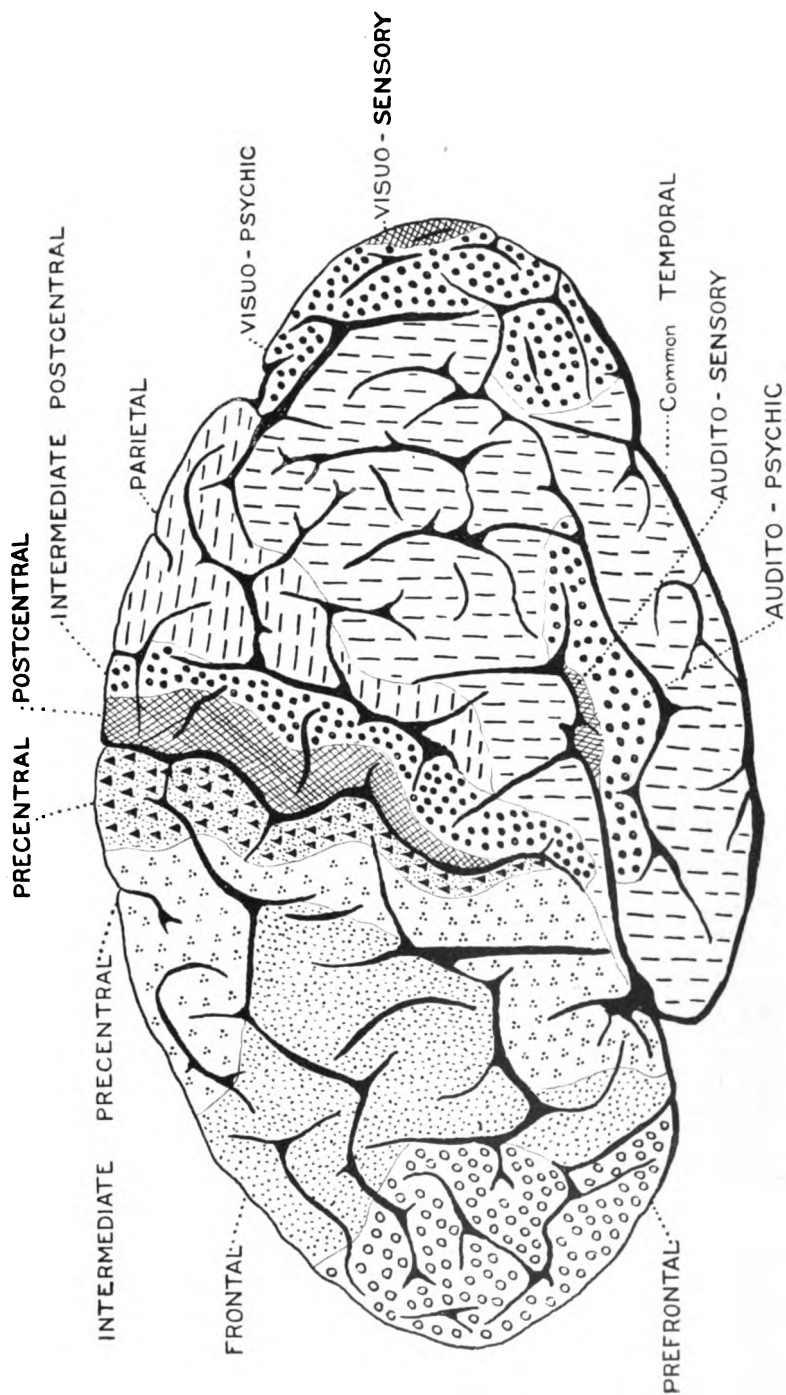
Another point on which I think I can supply an illustration is that in the human being the parts most prone to suffer from non-development are precisely those which are the last to appear in the course of phylogenic growth. In our pathological museum at Rainhill Asylum we have three remarkable brains, all showing well-developed motor, common sensory, visual, olfactory, and auditory cortex ; but all the frontal gyri anterior to the precentral, and all the parietal behind the post-central, are in a state of microgyria ; the condition is bilateral and symmetrical, and the subjects from whom these brains came were all idiots. Now, I can see no other way of explaining this lesion than by regarding it as a true instance of developmental failure or agenesis affecting that pallium which is the last to form in the progress of cerebral expansion.

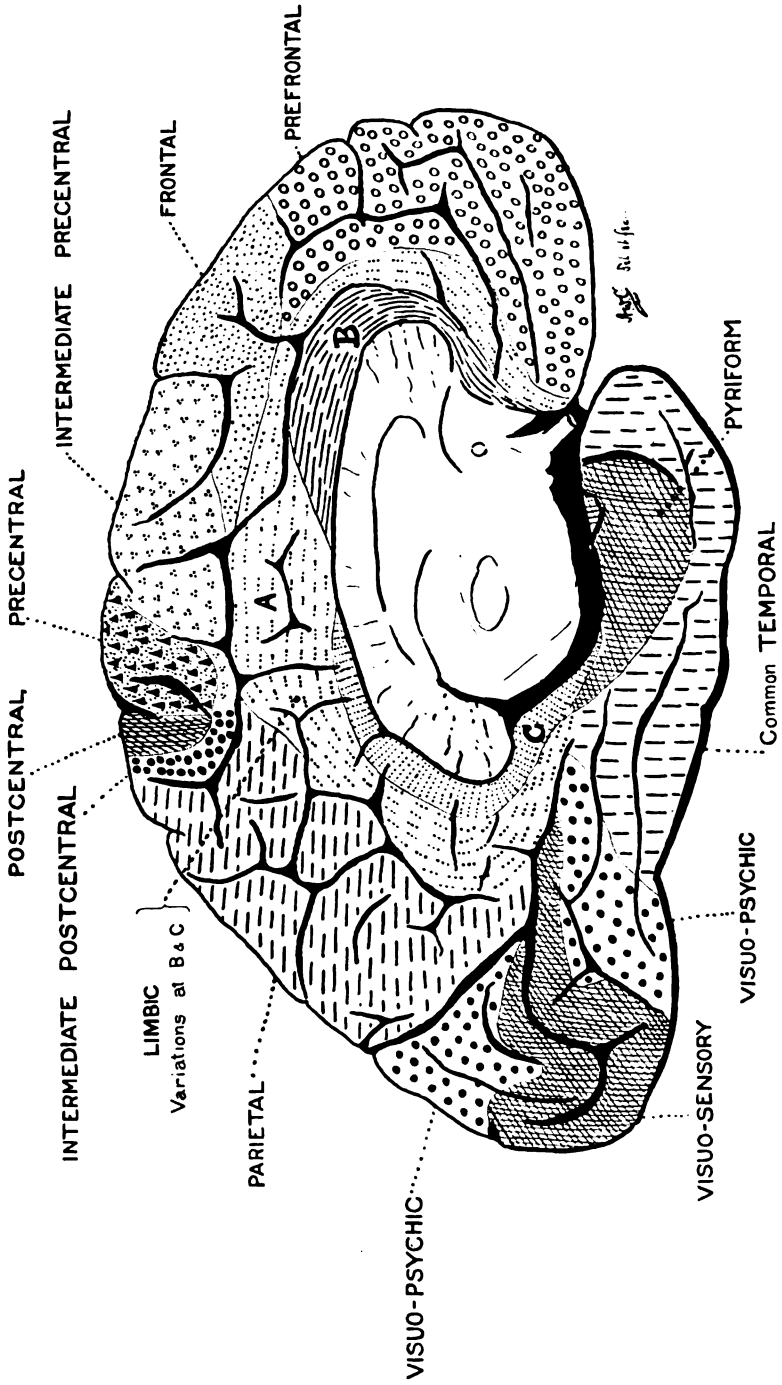
In conclusion, I will briefly indicate what I believe to be the exact distribution of other areas to which I have only made passing reference, and which are shown in the accompanying diagrams.

The visual cortex is histologically divisible into two areas. The first closely follows the calcarine fissure and is marked by the line of Gennari ; it is probably designed for the primary reception of visual impulses ; the second is an investing area which I have called visuo-psychic, and it may serve for the further elaboration of these impressions. In the anthropoid ape the same areas can be defined, but they extend more widely on the lateral surface, they are not specially related to the "Affenspalte," but follow the "external calcarine fissure" very closely.

The primary auditory area I locate on the transverse temporal gyri or gyri of Heschl, while the "audito-psychic" centre corresponds in distribution with the well-known "word-hearing" centre.

Part of the insula may deal with the recognition of taste impressions.





The olfactory cortex (pyriform) stands as it was. I would merely add that the gyrus fornicatus shows some points in common with it, and that histology gives no support to the view that the cortex of the former gyrus has to deal with common sensation. ⁽³⁾

⁽¹⁾ Read at the Annual General Meeting of the Association, held in London July, 1904.—⁽²⁾ Lantern slides were shown illustrating these points.—⁽³⁾ An account of this work *in extenso* is in course of publication by the Royal Society of London.

EXPLANATION OF DIAGRAMS.

Human brain. M—, æt. 41. Orthogonal tracings of the lateral and mesial surfaces (the former somewhat tilted to show the convexity) of the left cerebral hemisphere, with a composite representation of the distribution of the various areas defined from an examination in serial sections of the cortical nerve fibres and nerve cells in the normal brain and in various states of disease.

In a surface diagram it is impossible to give a true idea of the extent of these fields because cortex concealed within fissures cannot be indicated. Unfortunately, the figures are especially misleading in regard to some of the most important areas; thus the floor and not the lip of the Rolandic sulcus is the boundary between the precentral and postcentral fields, and the concealed portion of these areas is almost equivalent to that exposed. The same applies to the visuo-sensory field, while that marked "audito-sensory" is almost completely hidden away in the Sylvian fissure.

DISCUSSION

At the Annual Meeting in London, July 22nd, 1904.

The PRESIDENT.—Gentlemen, I am sure you will agree with me that our warmest thanks are due to Dr. Campbell for this most interesting demonstration; and of course there are many points which it may be beneficial to discuss. I do not myself feel competent to criticise his work, which is so histological and implies so much original investigation that it would be impossible for me to really seriously comment on it. There are two or three things which he seems to have very definitely settled—that is, the limit of the motor area and the importance of the relationship of the parietal lobe to consciousness. The question of the localisation of mental functions is, of course, one which we always think about and which no one has at all definitely settled; and Dr. Campbell has, I think, done extremely good service in impressing upon us the fact that it is not likely that consciousness is limited in any way to the pre-frontal or frontal areas. His showing of the concurrent development of the parietal lobe with the development of consciousness is most important. Another point is that, as he said, he plumps for the view that the anterior part of the parietal convolution is the arrival platform for common sensation. I shall be very glad to know if anybody will give us his views on this paper. There must be many histologists here who have worked at this subject.

Dr. URQUHART.—A good many of us have thought that there was reason to suppose that the frontal and pre-frontal lobes were in some way connected with the moral faculties, and that in cases of damage to these lobes there was a certain degeneration of the moral and higher psychological faculties. I think that has been rather set aside this morning, and I should like to know if Dr. Campbell rejects that opinion, which has been held for a long time. Another point is that some years ago I published the case of a man who was extremely musical and who died insane. For some time previous to his death the musical faculty had entirely disappeared; it was a sort of aphasia of the musical faculty. After death there was found to be an advanced degeneration of the tip of the temporal lobe, and I think that has been correlated with similar cases of the decadence of the musical faculty in

Germany by certain observers there. If Dr. Clapham were here this morning, he would be greatly indebted to Dr. Campbell for the help he has given him with regard to the theory he propounded so many years ago in placing the intellectual faculties at the back of the head. I need not add to what you have said, sir, as to the value of this paper.

Dr. ANDRIEZEN.—I am glad to have had this opportunity of hearing Dr. Campbell's excellent paper, with so much practical material in it, because what we want in discussing these problems of the brain are really exact and abundant data. And in this respect, as regards the human brain, he has brought forward a quantity of material, of which some at least is new. I was particularly struck with his photographs of brains showing agenesis, especially of the association areas of Flechsig. I have not seen anything like that before. I have certainly met, in *post mortems*, areas of agenesis due to epilepsy associated with arrest of development of nerve-cells microscopically, occurring perhaps as early as the fourth or fifth month of foetal life. Five or six specimens of that I have come across in recent years; and in 1897 I published an article in the *British Medical Journal* on the pathogenesis of epileptic idiocy and imbecility, in which these appearances were described as very common and constant. But they had not quite the localisation that Dr. Campbell describes. These areas which I found in idiots of congenital origin were of vascular distribution; they corresponded to certain vascular territories. So that we may have agenesis, a primary and purely nervous condition, with arrest of development of nerve-cells and areas irrespective of vascular distribution, and also agenesis of vascular origin, which may also give rise to idiocy and other forms of defective development. I have myself, like all who have worked in the comparative anatomy of the brains of mammals, found great difficulty, in my earlier studies, in making any homology between the crucial sulcus of the carnivora and the Rolandic fissure in man. They do not correspond, and the minute study of the histology behind and in front of the crucial sulcus shows that the differences do not correspond with what obtains in man. But I believe this was pointed out twenty-five or thirty years ago, by Bevan Lewis in one of his memoirs published in 1878 or 1879. This leads me to place some emphasis on this point. Bevan Lewis with remarkable insight mapped out in a strikingly accurate way the various areas of the brains in lower animals. But I will not linger on this, because you are all well acquainted with it. But since Flechsig definitely advanced his theory in 1895, our advance in this direction has been very great indeed. With most of the anatomical facts and histological details which Dr. Campbell has brought forward one can only express one's concurrence. But there are one or two points I would like to ask his opinion upon, as I feel inclined to differ. With regard to the destruction of the pre-frontal area, I believe Dr. Campbell said it produced no mental disabilities. I believe clinical evidence within the last five or six years, accumulated by such skilful observers as Bianchi, von Bruns, Höniger, and others, has shown clearly that small tumours not exceeding the size of a walnut, in the most anterior part of the brain, the pre-frontal lobe, are capable of producing dulness, apathy, and depressive mental symptoms; and that as these tumours grow larger and grow backwards, and thus come near the limits of the kinæsthetic area, kinæsthetic complications, such as slight movements of the hand or face, or excitation of the speech centre, with slight speech disturbance, are present. From a very careful study of the work on this subject, I have concluded that the extreme prefrontal area is part of the psychic area, and that tumours of it are associated with those distinct disabilities. It has been said that movement is not represented behind the fissure of Rolando. That is true of about 95 *per cent.* of the kinæsthesia; but I should like to ask whether Dr. Campbell has no evidence that slight oculo-motor representation is present in the calcarine area. I believe Munk was the first to call attention to this in the dog. Those of you who have examined histological specimens of the cortex of the cat or dog will remember that in the calcarine area there are collections or groups of large pyramidal cells, something like Betz cells. It is practically the only part of the brain, except the so-called motor area, in which they are present; and I believe Munk suggested that these cells are connected centrifugally (downwards) with the oculo-motor region in such a way that they act as cerebral adjusting centres for oculo-motor movements. With that exception, I agree with Dr. Campbell. I wish to add a few words about the question of phylogenesis of the brain. One of the best and most instructive ways—in fact, *the way*—of apprehending the

functions of the brain must be by tracing its phylogenesis. And that is just what Darwin has taught us. Take the amphibian brain. You will find it is a very lowly organ of representation: it is practically almost entirely an olfactory organ and nothing more. In some investigations which I made and published in *Brain* in 1894, I pointed this out, and others have done so too, that the olfactory fibres as they pass into the basal part of the brain of the frog extend and spread practically throughout its whole cortex, and that few, if any, other sensory fibres could be traced. So the cerebral hemispheres of the brain are practically an olfactory organ in the frog. Then as we rise higher in the scale we get the movements of the forelimbs especially, which are prominent in the mammalia, and especially the segments corresponding to the fingers, parallel with the higher development of the motor area; until you can, in a measure, trace a parallelism between the gradual increase in the kinæsthetic life of the animal and the development of the pentadactyle limb in grades of mammals, from the lower such as the rodentia, and the somewhat higher carnivora, to the highest, such as the monkey and man. I wished to emphasise the great importance of the comparative study of the brain, and I would express my great pleasure at having heard such an excellent paper.

DR. ROBERT JONES.—Dr. Campbell is doubtless aware of a very interesting demonstration which took place at Claybury some time ago, before the Psychological Society. Dr. Bolton therein laid very particular stress on the prefrontal lobe. He had a large number of sections at the position of the transverse fissure of Wernicke in the anterior part of the frontal lobe, and I believe Dr. Bolton, in a subsequent paper, published some of these details, which went to show very much, as far as one could appreciate them, the relationship between dementia and the large pyramidal cells. Evidently, from what I have learned to-day, Dr. Campbell is inclined to be somewhat sceptical about the intellectual functions of the prefrontal and frontal lobes so far as the pyramidal cells are concerned, and prefers, at any rate as far as I can make out, to place greater importance upon the parietal lobe as the part of the brain first connected with consciousness, although he stated there were marked cell differences between the frontal and parietal lobes. I should like to know whether Dr. Campbell agrees that the large pyramidal cells are concerned in the main with intellection, as Dr. Bolton believes, and that the prefrontal lobe represents essentially this highest evolved mental area; I was also interested in what Dr. Urquhart said. It seems to me the moral sense is capable of further analysis. It is not an unanalysable faculty: it is the resultant of a number of simple mental factors, and cannot apparently be located in one special territory of the brain.

DR. CAMPBELL.—I am delighted with the reception my demonstration has met with, and although there has not been a long discussion, I have the feeling that my work has been thoroughly appreciated by the members of this Association, and that, to me, is an ample reward for the time spent on it. Several important points have been raised by the gentlemen who have spoken, and I am specially obliged to them for mentioning these, because it affords me an opportunity of filling up one or two omissions. Dr. Urquhart's questions were particularly pertinent, and my answer to that concerning the function of the frontal lobe will also apply to one of Dr. Andriezen's questions. The point about the functional value of the frontal lobe which I do not seem to have made clear is, that the part which I am calling the "prefrontal area" is not of much importance. My meaning is, that it is probably a region with a future, but that at the present its evolution is imperfect. The area which I call "frontal," on the contrary, is of proved importance; there is a large amount of clinical evidence, almost incontrovertible, which I had not the opportunity of mentioning before, as I endeavoured to confine myself to histological evidence, which has been supplied by Leonora Welt and others, and emphasised by von Monakow, to the effect that destruction of what one may call the middle part of the frontal lobe—that corresponding to my "frontal area"—gives rise to various disturbances of the moral faculty. Then, on the other hand, there is as much clinical and experimental evidence proving that destruction of the tip of the frontal lobe—the "prefrontal area"—on both sides, gives rise to no effect at all. In this connection, I think Dr. Andriezen referred to Bianchi's experiments; with these I am familiar. Bianchi tried to remove the inexcitable part of the frontal lobe only, but it is doubtful whether he succeeded; he must surely have damaged the excitable region to some extent, and this would account

for his positive results. In reference to the cases of loss of the musical faculty mentioned by Dr. Urquhart, it is true that such cases stand recorded in the literature, and they aim at showing that this faculty is located at the tip of the temporal lobe, but this localisation is not finally proved; indeed, it is only by an analysis of a further accumulation of work, by earnest co-operation between the physiologist, the pathologist, the clinician, and the histologist, that this and many other difficult points can be definitely settled. I am glad to have heard Dr. Bevan Lewis' name mentioned, because there is no man for whom I have a greater admiration as a pioneer in cerebral histology. We would have been saved years of labour if his work had been duly recognised; personally I have found his descriptions of the "giant-cells" in man, the cat and the sheep so exact, that, after going over their area of location many times, I would not like to alter a single word he has written. I have been asked whether oculo-motor movements do not result from stimulation of the calcarine area; they certainly do, as Sherrington and Grünbaum have clearly shown; and I may further mention that there are several other parts of the brain special stimulation of which produces such movements. Thus, they have been obtained from the angular gyrus—and this is one of the points in Ferrer's argument that the same gyrus constitutes the "word-seeing" centre. But I think the most constant part from which eye movements have been elicited is one well in advance of the hand area. Horsley and Beevor first mapped out the field in the Orang, and their results have been confirmed by Sherrington and Grünbaum.

The Educational Treatment of Young Epileptics.⁽¹⁾ By
G. E. SHUTTLEWORTH, B.A., M.D., formerly Examiner of
Defective and Epileptic Children, School Board for London.

I HAVE thought that at the present time, when there is a prospect of systematic school provision being made for epileptic children in accordance with recent legislation, the attention of this Association might usefully be called to the necessities of the case.

I may just remind the meeting that legislation on the subject has been the outcome of much preliminary discussion. The Charity Organisation Society appointed a committee in 1890 to consider and report on the public and charitable provision made for the care and training of feeble-minded, *epileptic*, and crippled persons; and a book embodying the conclusions arrived at with regard to the two latter classes was published in 1893.⁽²⁾ Later the Government appointed a Departmental Committee to inquire and report (*inter alia*) as to the provision of suitable elementary education for epileptic children; and this committee reported to the Board of Education in 1898. The outcome was an Act of Parliament passed in the following year "to make a better provision for the elementary education of defective and epileptic children in England and Wales."

This Act had, unfortunately, two flaws which have militated against the provision of suitable school accommodation for the poorer class of epileptic children: the one, that the Act is not compulsory on all school authorities, but merely adoptive by them: the other, that in the original Act a limit of fifteen children only to be lodged in any one boarding-house of a residential school, with a limit of four such houses to an establishment, was unwisely imposed. This restriction, however, has since been relaxed by an amending Act, passed last year, giving discretionary power in this matter to the Board of Education, whose minute now permits thirty to be accommodated in a single house.

The Act of 1899 was, however, taken advantage of by the London School Board for a complete official examination of all the epileptic children of school age known to their officers, and in 1900 and 1901 this work fell to my lot. As the necessities for special methods of education in different classes of epileptics are illustrated in my report I may venture briefly to summarise it as follows:

Of 470 cases examined—

- (a) 17 *per cent.* seemed fit to continue in normal schools.
- (b) 27·5 *per cent.* were so far mentally impaired as to require instruction in “special classes” for defective children.
- (c) 40·0 *per cent.* required to be cared for and taught in a residential school for epileptics.
- (d) 15·5 *per cent.* seemed unfit for any education, requiring only medical and nursing care.

The (a) class included cases of a mild type or with infrequent attacks, not producing mental impairment or interfering materially with the discipline of the ordinary school.

The (b) class included cases with some degree of mental impairment, but whose fits were so slight or infrequent as not materially to interfere with the more individualised discipline of a special class for defective children.

The (c) class included cases in which fits were so frequent or so severe—or both—as to incapacitate a child from attending an ordinary or special school on account of disturbance of discipline involved, but yet possessed of educational capacity.

The (d) class comprised the residue of unfortunates who from physical or mental conditions—or both—seemed only suitable for hospital, asylum, or other custodial treatment.

Since the reception of this report a large number of children whose parents kept them at home merely on the ground of their being subject to fits have been brought into school attendance under heads (a) or (b); and last year negotiations were in progress for the school children included in class (c) to be accommodated in connection with Chalfont Colony, the board and care to be under the committee of the voluntary Association managing it, the school equipment and instruction to be provided by the London School Board. Owing to the impending absorption of that body by the London County Council the sanction of the Board of Education was withheld, and the matter is still in abeyance; but for the sake of the (at least) 150 children excluded (as a consequence of my report) from London elementary schools on account of epilepsy, it is to be hoped that a speedy arrangement will be effected.

Apart from the action taken by elementary school authorities, there exist in England (but not in Scotland or Ireland) certain voluntary associations for promoting the welfare of epileptics—including children—and we may briefly note what has been done by these in the way of education. The oldest and largest institution in England is that at Maghull, near Liverpool, now containing 204 patients of all ages and various social ranks. Here a day school for twenty-one younger inmates is carried on, and continuation classes for adults meet two evenings a week, and are attended by 103 students. The subjects taken at the day and evening schools are as follow: reading, writing, arithmetic, drawing, singing, history, geography, wood-carving, drill, and kindergarten work. The Government grant for the evening school was £57 1s. last year. The junior school is not under Government supervision in consequence of the committee preferring freedom from certain stringent rules imposed by the Board of Education. Dr. Alexander (the consulting medical officer) writes in appreciatory terms of the benefits accruing to the children from school attendance as regards conduct and self-control, even in such as from mental deterioration, defect of memory, etc., do not make any great advance in their studies.

At Lady Meath's "Home of Comfort" for epileptic women and girls at Godalming, accommodating about eighty patients (some of them paying cases), there are, in a branch establishment, eighteen children under twelve years of age. These have

regular school instruction and physical drill, and after twelve they have a good deal of industrial training, *e.g.* in basket-making, sewing, and housework. Some few work in the garden under a lady gardener.

At the Lingfield Training Colony, Surrey, established under the auspices of "the Christian Union for Social Service," there are seventy children in three homes, and another home for twenty-five additional cases is in course of erection. The children in two of the homes attend school, the third is a laundry home for older girls. The Rev. J. L. Brooks, the Resident Director, prefers to "take children as young as possible, and they follow a simple life of regular lessons, with abundant out-of-door life, and regularity of rest and play"; a simple but efficient dietary with almost absence from drugs is laid stress on by the Director. The school course includes kindergarten work, the three R's "gradually," knitting, basket-making, fretwork, needlework, and carpentering for some of the older boys. There is also a branch home for from sixteen to twenty boys at Starnthwaite, Westmoreland, one house being reserved for patients paying from £1 to £1 5s. weekly.

The Chalfont Colony has been already alluded to as destitute at present of children of school age, though two homes—for twenty-four boys and girls respectively—were actually erected previous to the passing of the Act of 1899; but, owing to its restricting the number of residents in each house to fifteen, these were diverted to another purpose. The Board of Education now permits as many as thirty to be boarded in one house, so that it is to be hoped that very shortly the Executive Committee will find it practicable to realise what it describes (in its last report) as "one of its chief aspirations—the extension of its work to the care of *young* epileptic children."

A Roman Catholic Sisterhood has recently opened a residential school for fifty-six epileptic children of both sexes at Much Hadham, Herts. The buildings are strictly in accordance with the requirements of the Board of Education; the school arrangements are under Government inspection, and conducted by a certificated teacher.

At Sandlebridge, Cheshire, a large institution for epileptics has been erected by the Lewis trustees, and will shortly be opened. It will provide, not only for the care of adults, but for the education of epileptic children.

From this general sketch of what has been done in Great Britain for epileptics of school age it is evident that the provision made for them is totally inadequate. Assuming that only one child in 1,000^(*) elementary school children is epileptic, and that not more than half require to be provided for in residential institutions, there is need in England and Wales for educational homes for about 3,000 children of this class. That actually provided is for less than 200. Many epileptic children, for lack of special provision, languish in the infirmaries or imbecile wards of workhouses, or are relegated, if any dangerous symptoms present themselves, to the county lunatic asylums. Of course, insane epileptic children are properly placed in the latter, but appropriate training in well-organised residential schools would tend to prevent mental deterioration in many cases.

As regards provision for education of children of the better social class, there is but little in this country, though some of the schoolmasters who nowadays run schools on "rational" lines—that is to say, where physical and manual training, nature-study, and simple experimental science form an important part of the curriculum—are not unwilling to receive mild cases whose intelligence is not much impaired. The difficulty, of course, is the risk of disturbance of school discipline which the occurrence of a fit, even at long intervals, involves; and I am inclined to think that Chalfont would do useful service were it to provide educational care for a certain number of paying patients of the better social class, as is indeed done at Maghull and Starnthwaite.

So far I have taken it for granted that educational privileges must not be denied to epileptic children simply because they are epileptic. Such a proposition hardly needs arguing before this meeting; but as there is a lingering notion, even with some medical men, that instruction during school age is not good for epileptics or is thrown away upon them, I may perhaps be allowed to support my position by citing certain distinguished authorities on the medical aspect of the subject. Dr. William Alexander, of Liverpool, from lengthened practical experience of Maghull patients, writes: "Epileptic children should be educated physically, mentally, and morally, anything like over-pressure being avoided, and by the very best and most judicious teachers. It is only by securing a satisfactory development of

all the faculties of the epileptic child that we can hope to render stable the supposed abnormal instability of the nervous centres. In regard to the danger of allowing these children to play at games that might possibly be dangerous, our conviction is that epileptics rarely have fits when all their faculties are on the alert." "It is a great mistake to allow epileptic children to be idle," says Dr. Ferrier; "it simply increases the instability of their nervous system." Dr. Spratling, of the Craig Colony, writes that "labour is the greatest therapeutic agent in curing epilepsy," and this maxim applies, I think, equally to children and to adults. From my own observations I should be inclined to say that well-arranged and suitable occupations both in and out of school are of positive benefit by diverting nervous energy into normal channels and diminishing tendency to abnormal discharge in the form of fits. In not a few cases I have seen where parents have reported frequent fits when the child is kept from school, modified but regular instruction has appeared to be positively beneficial in diminishing the liability to attacks. Methodical occupation and games in the open air are undoubtedly salutary. Manual work in the garden or on the farm are especially useful, and such work, properly supervised, admits of being made educational. As regards sports, of course discretion must be used; those distinctly risky (*e.g.* rowing) must be avoided, but lawn-tennis, cricket, and even hockey and football, need not be tabooed.

In America, where matters are more advanced than in England, several colonies have been established for dealing with epileptics, juvenile as well as adult. Dr. Spratling, Superintendent of the Craig Colony, New York State, writes in one of his reports that "the greatest work this Colony will ever do will be with the *young* epileptic." In connection with this colony there is a regular school establishment, each young patient capable of instruction attending two and a half hours daily, girls in the morning, boys in the afternoon. Female teachers are employed, and physical and manual training form a large and important part of the school exercises. Careful records, entered up monthly, are kept of the individual pupils. Dr. Clark well remarks that the education of the epileptic child must necessarily proceed on somewhat different lines from that of the merely feeble-minded child. With the epileptic there is much variation from time to time in capacity to receive

instruction. One day it may not be very different from that of the normal child; the next it may be almost *nil*; and the aim of the teacher must be to catch the pupil when his or her mind is in a condition to assimilate the knowledge sought to be imparted. When fits are occurring frequently the attendant mental weakness is apt to produce loss of memory and incapacity for concentration. Pupils therefore must be considered individually by the teacher and not merely as members of a class. The teacher in a school for epileptics requires, indeed, to be endowed with rare discrimination, infinite patience, and the faith that "hopeth all things," for epilepsy is an intermittent affection, and what the pupil learns easily to-day may be beyond his power to-morrow, and on the third day all that he has previously learned may seem entirely effaced from memory. Happily, however, in most cases it is not a permanent effacement, for on the cessation of the periodic paroxysmal disturbance which epilepsy causes former mental impressions are revived. From this point of view we may regard the progress of the epileptic's education as almost of a tidal character, advancing by undulations, which may again recede even beyond their line of origin, but still, in favourable cases, like the *rising* tide, overcoming obstacles and eventually reaching the high-water mark of knowledge. It is true that if the disease prove persistent or progressive the tide will fall back. This, however, should not deter from attempts at instruction in any apparently suitable case, and there is no good reason to deprive epileptics, as a class, of the educational birthright which all civilised nations concede to their children.

From the observations submitted I think we may deduce the following general propositions:

1. That epilepsy in children *per se* should not be regarded as a disqualification for education.
2. That as regards the elementary school class, all children reported epileptic should be scheduled by school authorities and submitted for discrimination by their official medical examiner as to their school treatment or otherwise, somewhat on the lines sketched out on page 663.

It is obvious that the educational treatment of epileptic children must be *medico-pedagogic*, the doctor and the teacher working hand-in-hand. The school time-table must necessarily be a matter of medical concern. As a rule the lesson periods

should be shorter, and the intervals of repose longer than those appropriate for normal pupils of the same age. Physical exercises and manual occupation (Slojd, etc.) should be judiciously interwoven with lessons requiring more abstract mental application. Whenever circumstances permit, instruction and occupation should be given out-of-doors; and nature lessons of a practical character—leading up later to horticultural and agricultural work—should form part of the school curriculum. For all children, indeed, but for epileptic children especially, it seems to me, education should be of such a kind as to cultivate the observing powers so that they may have eyes to see

“Tongues in trees, books in the running brooks,
Sermons in stones, and good in everything.”

(¹) Read at July Meeting of Medico-Psychological Association.—(²) *The Epileptic and Crippled*, London, Swan, Sonnenschein & Co.—(³) This would seem to be about the proportion existing in the London School Board jurisdiction, taking (in round numbers) 500 epileptics to 500,000 children scheduled for school attendance. Dr. Oswald Berkhan, in a paper, “Schools for Epileptic Children,” read before the International Congress on School Hygiene at Nuremberg, stated that in the Rhine provinces and Westphalia the proportion of epileptic school children to *inhabitants* had been ascertained by an official enumeration to be 2 to 10,000, as was also the case in Frankfurt and Potsdam. On this basis the number of epileptic children to be provided for in England and Wales would be in excess of that stated in the text. In 1903, out of 16,830 children attending the public elementary schools of Brunswick 42 were epileptic (1 in 400).

DISCUSSION.

At the Annual General Meeting in London, July 21st, 1904.

THE PRESIDENT.—We are much indebted to Dr. Shuttleworth for this paper. He has brought forward a point which is a practical difficulty always among those who have to treat children, whether among the poorer classes in out-patient departments of hospitals or in private. And one is glad to hear from him that he considers many epileptic children who are looked upon rather as being past repair still ought to be carefully educated; and I think his statement is very important about the doctor working in conjunction with the teacher, or rather the teacher working always under the supervision of the doctor. We shall be glad to hear any discussion on the subject.

DR. SAVAGE.—It seems to me that two good things are represented in this paper. The first is that it is certainly not correct to say that because a child is an epileptic he is not educable. What Dr. Shuttleworth has pointed out, and what my experience has confirmed, is that judicious education, such as our President and Dr. Shuttleworth recommend—the education supervised by some medical man—is to be carried on, and carried on with great benefit, not only to the child, but also to the epilepsy. And again, I think one has got so far as to recognise that epilepsy is a curable condition, if it is treated soon enough, in a great many cases. There is another thing which pleased me very much indeed, and that was that I did not hear any reference to bromide. I admit, however, that there are conditions in which the doctor, working with the schoolmaster, may find bromide useful. One is certain that the contention of Dr. Shuttleworth is the contention which all of us

who have had experience will confirm, *vis.*, that a modified, persistent, methodical use of the mental faculties is beneficial to the young epileptic.

Dr. RAYNER.—I would like to thank Dr. Shuttleworth for bringing forward this subject. One feels how much necessity there is for great care in the treatment of early cases of epilepsy as in other mental conditions in childhood. Many of the epilepsies in childhood one finds are due to stomach conditions and other forms of peripheral irritation which, when they are relieved, bring relief to the epilepsy—that is, if they are not made worse by the injudicious use of bromide. When I stopped using bromide at Hanwell many years ago people were inclined to think I was very extreme, and I am glad that the course I adopted with regard to the use of bromide in epilepsy is now very generally accepted. There I found that the tendency, even in old chronic cases of epilepsy, was always towards improvement if there were not accompanying physical conditions which caused deterioration of health. Year by year the fits became less frequent, and the general trend was towards better health. I am sure there is the same tendency in early childhood, and that there are many cases which lose their fits at the second dentition, while many more lose them before puberty. I think if these early cases of epilepsy are carefully and thoroughly treated and trained and educated they are still more likely to lose their fits. Therefore I am much interested in hearing Dr. Shuttleworth's paper, and especially hearing him insist on the great value of steady daily muscular occupation. Among my patients I have noticed that when a man was steadily occupied in some light muscular task he went on improving and his fits became less and less frequent. If from any cause he threw up his occupation and became idle and got into the rut of unoccupied people, his fits began to increase in frequency.

Dr. MILSON RHODES.—I have visited most of the epileptic institutions in America, and there is hardly a State in America which cannot show a better and larger institution than anything we have in England, and I think we should provide for this class of cases. With regard to Dr. Shuttleworth's point about employment for these children, it is of no use establishing epileptic schools without plenty of land, because in all the best institutions you will find the cases do best when employed on the land, and they do worst where they have a large amount of bromide of potassium administered to them. Bromide of potassium is not a cure for epilepsy. It may moderate some cases, but I am certain that degeneration goes on faster when you give bromide than when you do not. Another matter is that many of these institutions are under clerical or lay heads. I am glad to say the Lewis Trustees have appointed a medical man as superintendent, and if you are to get good work out of epileptic colonies, wherever they are, you must have medical superintendents for them.

Dr. ROBERT JONES.—I would like to utter one word of protest about that change in fashion with regard to the treatment of the epileptic. I believe most emphatically in bromides, and if Dr. Savage had been able to stay one minute I should have applied my protest against a fashion in medicine to his own teaching. The great thing is, as he used to teach, to break the habit in regard to epilepsy, and I do not think there are any drugs which will enable you better to break the habit than bromides. I have had a patient from Pastor von Bodelschwinck as a private patient at Claybury, and I have had some experience at Earlswood amongst children, and I feel strongly that the beneficial effect of bromides should not be allowed to disappear because of changes of fashion in drugs. There are two things necessary. Firstly, the medical officer should watch against auto-intoxication. Half the fits are due to a want of proper supervision in relieving constipation. With regard to the bowels, they should be opened every day. The tendency of these patients is towards constipation. Secondly, break the habit of the fits, which can best be done either by bromides, or these in combination with borax. I was glad to hear Dr. Shuttleworth introduce the question of penal drill, as he called it, in the open air. I believe graduated exercises and proper drill in the open air—and I have had a good deal of experience with the application of these under properly trained governesses—is an absolute necessity. We know that the first outburst of mental effort in the baby is that he kicks and he thinks. The first chain in thought is the association of muscular movements. There is first spontaneity, and then the association of a movement with some purposive effect, and if you want some remedy against epilepsy with its terrible deterioration, as is shown by failure to fix the attention, use physical drill. I was very much interested in the remarks of Dr.

Milson Rhodes. He is not an expert in our own branch, but no one has devoted so much time, or used his great powers of administration to such valuable practical effect, as he; and I am sure all members of the Association are pleased to have him amongst us, and his recorded experience has done much to benefit the treatment of the mentally affected. In conclusion I raise a strong protest against what is seemingly the fickleness of fashion in the treatment of disease.

Dr. RAYNER.—I object, sir, to Dr. Jones' application of the word "fashion" to the giving of bromides. I left off giving bromides on conviction, on reasoned conviction, and on observations made thirty years ago. I think I did not change the fashion, and I have had no desire to change it since. I have had many opportunities since then of confirming myself in the views I hold, and I think Dr. Jones has just given me a good example in insisting on attention to the bowels and other irritating conditions of the body. If that were always done, he would find there was no need for bromides.

Dr. BOND.—One remark made by Dr. Shuttleworth I was struck particularly by. He was quoting somebody who had stated that when all the mental faculties were on the alert, these seizures were decreased. That rather surprises me, because from what I have observed among the few whom we do put to the higher intellectual occupations, when there is the slightest pressure then there are epileptic manifestations, either fits or mental trouble; and my brief experience is against anything like the production of any severe mental effort. I am strongly of opinion that the patient with epilepsy should have the opportunity of a reasonable amount of education, but I would not suggest that any high intellectual attainment should be attempted. So long as the patient is able to create happiness out of his environment for himself, and to make himself useful, that should be about the sum total; all the rest should be of an entirely manual character. I would join with Dr. Jones in his remark about bromides, and I think that where bad effects have been manifested—and there can be no doubt that such cases have arisen—it is because the condition of the bowels have not been attended to, or, more important still, the question of exercise. I give a laxative with the bromide. If you give bromides to insane patients, the maniacal and others, and if they are at all kept in confinement, you get bad results, whereas if they have regular and proper exercise, good results ensue.

Dr. TAYLOR.—My experience at Darenth and Earlswood entirely bears out that which Dr. Bond has just said with regard to the technical instruction of these patients. I would like to ask Dr. Shuttleworth one question on the subject of diet for these patients. Has he found any benefit from knocking off meat in the case of these epileptics? I have not kept a record of the results of my experiments, but I have tried it, and there seemed to be no beneficial effect whatever.

Dr. ANDRIEZEN.—I would like to ask if Dr. Shuttleworth has tried the method so widely adopted in France, *vis.*, that known as salt starvation, in the treatment of epileptics. Several French doctors of large experience have tried it, and it is said to be successful in diminishing the number of fits. It consists in eliminating all salts from ordinary food and substituting a little bromide for table salt. With regard to bromide, there is one point which is not particularly insisted upon, but which I think we ought, as physiologists, to pay attention to; and that is, that the bromide which is largely prescribed is the potassium bromide. Why should that be, when it is known from experiments that it is a cardiac depressant or poison? Since I entered upon the speciality of mental diseases I have never prescribed potassium bromide; it has always been the sodium or ammonium salt. I have used a combination which was recommended by the late Professor Wood, of America, a combination of ammonium bromide with antipyrine. I made experiments with it for several months at the West Riding Asylum and at Darenth, and used it with benefit in every case thereafter; it had a brightening effect, and it diminished the stupor to which many epileptics were naturally subject.

Dr. SHUTTLEWORTH.—I am sure I am very much obliged to you all for the kind attention with which you have listened to me, and for the comments which have since been made. My paper was essentially upon the educational aspects of the treatment of young epileptics, though I should be the first to admit that matters of diet, and even matters of medication, occupy a very important relation to educational methods. I was asked a direct question about diet, and I

may say I have had some little experience of it for some time as a routine treatment. At one period all our epileptic imbeciles at the Royal Albert Asylum, Lancaster, were kept on a vegetable diet for, I think, six months; and then we let a certain portion of them go on with their ordinary diet for another three months. I have not the figures in my mind, but I know the general result was that we did not find very much benefit from the abstention from meat. Very much more benefit was to be traced to the fact of the food being properly comminuted. It was not so much that meat, as meat, as a nitrogenous food, produced epilepsy, as that very frequently the stomach was disordered by the tendency which epileptics have to bolt lumps of meat. If the meat is first passed through a mincing machine there is not that risk. Dr. Bond mentioned a quotation which, I think, was from Dr. Alexander, of Liverpool, with regard to the faculties being on the alert. I think it was his plea that these epileptic patients should not be kept from engaging in such games as cricket, so long as their attention was agreeably kept on the alert, and that they would probably not then have fits. I agree with what fell from Dr. Bond about the inappropriateness of working their intellectual faculties at anything like high pressure, as it would be prejudicial to do so.

After further discussion in which Drs. Carswell, Douglas, Mills, Rayner and Shuttleworth joined, it was agreed that the following resolution be transmitted to the Parliamentary Committee:

"That the Parliamentary Committee of the Medico-Psychological Association be requested to consider the desirability of making the Act of 1899, referring to the education of defective and epileptic children, compulsory on all educational authorities, and not merely adoptive as at present."

The Statistical Tables. By CHARLES A. MERCIER, M.B.

The criticism that, at the Annual Meeting, I applied to Tables IV and VI, was purely destructive, and while it was, as I think, efficacious, it is open to the retort that the criticised tables must stand, unless I can suggest something better. The object of this present communication is to suggest tables which shall not be open to the objections which I have urged against those proposed by the Statistical Committee.

Table IV must of necessity suggest and contain a classification. It is bootless for the Committee to disclaim the intention of classifying. So long as such a table, for such a purpose, is included in their recommendations, they cannot escape from the onus of presenting a classification. As the scheme which is now adopted by the Association will determine in practice the classification which will prevail, in this country at least, for many years to come, it is very desirable that it should be provisionally satisfactory. By this I mean, that it should represent and embody the general state of our knowledge at the present time; that it should receive very general approval and support; and that it should be sufficiently elastic to be adapt-

able to future discoveries. If it possesses these qualities, we may assume, with some confidence, that its adoption will not be confined to this country, but that it will serve as the basis for an international comparison of statistics of insanity.

In my criticism, reported in another page of this Journal, of the table suggested by the Committee, I have laid down three essentials of a good classification. It should include all the things to be classified, and nothing else; it should associate things that are alike, and separate those that are unlike; and it should not include the same thing in more than one class of the same rank. These, I submit, are the general conditions of a good classification. But for a good classification of insanity, something more is required. It is for the use of all sorts and conditions of alienists, from the university professor to the newly-joined assistant medical officer; and from the pathologist, whose labours are chiefly in the laboratory, to the "practical" superintendent, whose interests are mainly in building and draining and painting. It must therefore be easy of application. It must distinguish differences that are easy to discriminate; that are patent, manifest, and free from doubt. It must depend on no niceties or refinements of diagnosis. It must be expressed in terms that are generally agreed upon, or are defined in senses that will be generally accepted. It must rise above the obsolete superstitions of the past, without embodying doctrines upon which time has not yet set the seal of efficacy. I seem to hear Dr. Yellowlees protesting, in the words of Imlac—"Enough; thou hast persuaded me that no man can be a classifier of insanity." Nevertheless, I venture to think the task is not impossible.

The first essential of a good classification has been stated to be that it must include all the things that we seek to classify; so that if this be true, the first preliminary to making a classification is to determine what things are to be classified—what is to be the subject-matter of the classification. Insanity, it will be said. But it is tolerably obvious that no classification can be made of one thing. A single thing can, in a sense, be classified, by placing it in a class among other things; as insanity may be classed among diseases. But this is not the sense in which we are using the term classification. What we now mean by the term, is the distribution of things into classes; the like together, the unlike apart. In this sense, we

cannot classify insanity, if insanity is one thing. Are we then to follow certain writers, and deal, not with insanity, but with insanities? Are there in fact, included in the term insanity, many, or several, things, so distinct from one another that they can be divided into classes, and is this what we mean when we speak of classifying insanity? My own opinion is clear and strong that there are no such divisions within the disorder that we call insanity, but that it is one and indivisible; but it is quite unnecessary to discuss this matter, since it is indisputable that the purpose of these tables is to enable a classification to be made, not of kinds, but of *cases* of insanity; and it is to the classification of cases of insanity that my endeavours will be limited. It will be understood, of course, that a classification of cases of insanity is very different from a classification of insane persons.

To keep as long as possible upon the firm ground of indisputable fact, my next assertion is that no classification hitherto proposed has commanded general assent. If there had been any such classification, it would have been accepted by the Statistical Committee. But, instead of taking an existing classification, they have proposed one of their own. Upon looking through the vast scrap-heap of discarded classifications, I find one identical defect which vitiates them all. The proposers have been men, for the most part, of great knowledge of insanity, but they have had no knowledge of the canons of classification. Now, the primary canon of classification is that the scission of each class must proceed upon a single principle,—must be governed by the presence or absence, or by the modes or degrees, of one single attribute of the things classified. To divide simultaneously upon more than one principle, must produce confusion; and each additional principle introduced, makes confusion worse confounded. This canon has been violated in every classification of insanity yet proposed, including that in my own text-book; and, that I may not be thought to be prompted by animus, I will make this the butt of my criticism. It is true that I have avoided in it some of the most obvious pitfalls into which my predecessors have fallen. I have not erected “mania,” or excited conduct, which is a *manifestation* of insanity, into a *kind* of insanity, and placed it on a level with general paralysis, or *folie circulaire*, which include mania among their manifestations. No physician

would propose a nosology including, in the same rank, as co-ordinate divisions, palsy and acute anterior poliomyelitis, or jaundice and cancer of the liver, or dropsy and mitral insufficiency; or dyspnœa and capillary bronchitis. It is evident that such pairs are not mutually exclusive; are not comparable on the same basis; cannot constitute co-ordinate parts of a working classification. The one element is a symptom, the other is a morbid change underlying this and other symptoms; and, without discussing the complicated problem of what is and what is not a symptom, it is clear that a classification so conducted is founded on sand, and cannot withstand the lightest breeze of criticism.

This pitfall I have avoided, but there still remain, in my classification, faults enough to condemn it, which are owing to neglect of the primary canon of classification that I have laid down. Look down the list, and you will find one kind distinguished by its causation (alcoholic insanity); another by its underlying morbid change (general paralysis); another by the nature of its associate (epileptic insanity); another by the course of the disease (*folie circulaire*); another by its predominant symptom (fixed delusion); another by the time of its origin (congenital imbecility); and another by the intensity of the disease (acute delirious mania). I have laid down the principle, which I submit is incontestable, that the primary division of any class must be made upon one basis of division, and one only; and here are no fewer than seven, all employed simultaneously to effect the partition! It is a misnomer to call such an arrangement a classification. It is a higgledy-piggledy conglomeration. It is not nearly as scientific as the arrangement of a library according to the size of the books or the colour of the bindings. These are perfectly legitimate modes of classification, for, though they do not go deep into the nature of the things classified, they are at least governed by a single principle. But, to parallel the arrangement of insanity which I have proposed, and which is not more confused and confusing than its predecessors, we must divide our library into cloth-bound, gilt-edged, green, illustrated, quarto, historical, and dogs'-eared books. A pretty classification, truly! Into such a quagmire have I been led by too sedulously cultivating that reverence for authority which it has always been my object in life to cherish!

The first canon of classification is, then, to divide each class upon a single principle, which may differ for different classes, or for successive divisions of a class; but for each process or act of division must not be departed from. Upon what principle, then, should the first division of cases of insanity be made? Upon one of those enumerated above, all of which are sanctioned by custom, or upon some new and hitherto unutilised principle? Again, reverence for authority, and desire to obviate opposition, impel me to choose a principle already in use.

Whatever principle is chosen, it must be one that can be applied to every case, and this qualification at once narrows our choice. It eliminates the principle of causation; since there are many cases in which the causation is uncertain, some in which it is unassignable. It excludes the pathologico-anatomical basis; since of this we are, in the majority of cases, ignorant. It excludes the basis of association; since, in most cases, there is no peculiar associate. It excludes classification by the course of the disease; since, in most cases, the course is unknown until it is finished. There remain the predominant symptom, the time of origin, and the intensity of the disease.

Of these three, it is obvious that the most fundamental is the time of origin of the disease, which would allow us to make a first division into congenital and non-congenital cases, and to continue the division of the latter, if we choose to do so, according to the year of life at which the insanity appears, or, more generally, into youthful, adolescent, mature, climacteric, senile, etc. But, if we make our first division into congenital and non-congenital, we are at liberty, if we so desire, to take other principles for the subsequent division of each class, without thereby violating any canon of classification. The first division, into congenital and non-congenital cases, we may accept, since it is a valid division; it is in accordance with traditional usage; and it is clinically convenient. It is not, however, of absolute validity, for many cases of occurring insanity, in which the certifiable degree of insanity does not appear until late in life, show some defect, short of this, which has existed and been evident from birth. Nevertheless, remembering that we are dealing with *cases* of insanity, it is a useful practical distinction to separate those in which recog-

nisable insanity exists from birth, or from as early an age as insanity can be recognised, from those in which the malady is not accepted as existing until later in life. Our first division, therefore, will be into congenital and non-congenital insanity. Each of these has to be further divided.

Congenital insanity may be divided, by a choice among the principles already enumerated, according to its degree or intensity, or according to its mode of causation (if known), or according to its associates. The degree may be either imbecility or idiocy, according as the patient is or is not of sufficient intelligence to safeguard himself from the common physical dangers, which beset all human beings from hour to hour and from minute to minute—from dangers of falling into pits, or into fire or water; of injuring themselves with cutting or other instruments; of collisions with moving bodies, and so forth; such as prevent us from leaving very young children alone. Having made this division, we may then make a co-ordinate classification by any of the remaining six principles; and the advantage of a classification by axes of co-ordinates is that, so long as one axis is governed by a single principle, the other may embrace more than one, without violating any canon of classification or introducing any element of confusion. Of this advantage we shall be glad to avail ourselves in subsequent groups, but for the present we need employ but one principle—that of association. Some of the associates are causal, no doubt; but they are introduced here, not as causes, but as associated conditions. Causes, regarded as causes, should be confined to the causation table, and should not, I think, be utilised for purposes of classification. A cause, which has ceased to operate, has ceased to exist; and it is not practicable to classify by non-existent qualities. For the purpose of classification, we should use, as far as possible, those qualities which can be ascertained by examination of the case. If features in the history are used for the purpose of classification, they should be features whose existence is beyond doubt, which causes seldom are. The classification of insanity of congenital origin will be as on page 678.

It may, of course, happen that the same case may be assignable to more than one column in such a table, but this does not vitiate the classification. An imbecile may have a traumatic deformity of the head, be hemiplegic, suffer from epilepsy and

deformity of the limbs. The arrangement remains valid. There is no cross-classification.

To non-congenital insanity the same general reasoning

	Idiocy. .	Imbecility	Totals. .	Microcephaly.	Mongolism.	Cretinism.	Hydrocephaly.	Hemiplegia.	Infantilism.	Dwarfism.	Giantism.	Epilepsy.	Congenital syphilis.	Deaf mutism.	Pre-cocious.		Deformity.			Totals.
															Maturity.	Senility.	Of head.		Of limbs.	
																	Traumatic.	N on-traumatic.		

applies; and the first task is to determine the principle on which the primary division should be made. For reasons already given, we are restricted to three alternatives. We may divide such cases according to the time of their origin, the predominant symptoms, or the intensity of the symptoms. The sketch, already made, of the classes that result from dividing according to the time of origin, shows that principle to be inappropriate. The time of origin is not always known. If known, it constitutes an arbitrary and artificial mode of division, whose classes are not distinguished from each other by any quality except that according to which the division is made. It is no index to other likenesses and differences. The object of a classification is to group like things together and separate unlike things. So that the principle that we choose should go deep into the nature of the objects classified, so as to secure that those grouped together shall be alike in many respects, and those separated unlike in many respects. The time of origin is not a good principle from this point of view, for it does not, as a rule, carry with it a large number of associated qualities. It does so in some cases, it is true, as the terms adolescent insanity, climacteric and senile insanity, indicate; but not every case of insanity occurring at a certain time of life is climacteric, and not every case occurring in advanced life is senile. Moreover, while the principle could easily be applied to *occurring* cases of insanity, it would often be impossible to

apply it to *continuing* cases; for in very many such cases the time of origin is not ascertainable; and, when it is ascertainable, it is not apparent. It must be sought for by rummaging in old records; it is not manifest from the clinical features of the case. On many grounds, therefore, time of occurrence is to be rejected as a principle of classification of non-congenital cases.

Classification by the predominant symptom is the most obvious mode, and the mode which is always the first to be adopted. It is on this primitive method that palsy, and jaundice, and dropsy, and mania were erected into classes of disease; but the mention of these classes indicates at once that the method is but a tentative and temporary expedient, useful in a primitive state of knowledge, but to be superseded as soon as the advance of knowledge permits. Has the advance in our knowledge of insanity proceeded far enough to admit of the abandonment of this principle of classification? I do not think it has. We cannot yet afford to dispense with it altogether, but its manifest imperfection should lead us to postpone its employment as long as possible; to use it for the minor divisions only, and to make our larger and more comprehensive classes upon some more comprehensive principle, which carries with it a larger number of implications, discriminates more differences, and associates more similarities. Where is this principle to be found? Of the principles already in use, but one is left unrejected, and we are compelled either to adopt this principle, and divide our cases according to the intensity of the symptoms that they present, or to seek some principle that is new and hitherto unused. Native conservatism shrinks from the latter alternative, until a fair trial has been made of the former; and, when the trial is made, it is gratifying to discover that the intensity of the insanity does constitute a very fair index to its nature, and carries with it a sufficiently large number of other attributes to justify its adoption as a principle of classification. The minor groups, within these larger classes, may well be characterised by the predominant symptom that the cases present.

Intensity can very well be distinguished into four grades, as follows:—

1. Fulminant;
2. Acute;
3. Sub-acute;
4. Chronic.

The last term is used, of course, in its secondary meaning of lack of intensity more than in its primary sense of lengthy duration, though the latter is not excluded.

This arrangement will be found to satisfy, to an unexpected degree, the requirements which J. S. Mill attaches to "a natural classification grounded on real kinds." "The problem is," he says, "to find a few definite characters which point to the multitude of indefinite ones," and a nearer approach to a solution of this problem is made by the selection of intensity, as the definite character, than would have been anticipated.

The first group, in which the intensity is at maximum,—fulminant insanity,—includes what has been always regarded as a true natural kind, *viz.*, acute delirious mania. This variety of insanity may rightly be called a disease. It is distinct in its features from every other disease. It runs a definite course, during the whole of which it is recognisable. Though its course is not certainly known, it is most likely allied to the specific fevers. In any scheme of classification of cases of insanity, it must form a separate group; and, in the scheme that is proposed, it finds a place prepared for it.

Acute insanity is less strictly demarkated; but, nevertheless, it forms a very natural kind of insanity. Acute mania, acute melancholia, acute suicidal insanity, acute religious mania, acute nymphomania, acute stupor, all resemble each other in being acute, that is in the intensity of the malady, and although they differ widely from one another in extreme and well marked cases, intermediate forms are much more frequent, in which the special characters of the different groups are blended or approximated. Acute mania and acute melancholia, or, as I prefer to term them, excitement and depression, are very frequently united. Every case of acute insanity is a potential suicide. In every case, we have to expect impulsive outbreaks of violence. In every case, refusal of food is expected, and in most it occurs. The same is true of masturbation and other morbid sexual manifestations. Every case, that reaches a sufficient intensity, becomes wet, or dirty, or both. In all cases, the same broad principles of treatment are applied. The whole group of cases forms, as has been said, a well characterised natural kind, in which sub-groups may be formed according to the most predominant feature, but all such sub-groups may well be included in a single class.

One objection, it is true, immediately presents itself. Such a group, so characterised, must include those cases of acute insanity which are the opening stage of general paralysis. It seems, at first blush, a violation of natural affinities to divide general paralysis, and to place its early stage in one class, while its later stages are relegated to a second, and perhaps a third. But the objections to this course may be very easily overcome, and the compensating advantages are great. It is often doubtful whether a case of acute insanity is one of general paralysis or not; but there is rarely any doubt as to whether a case can or cannot be called acute. In the first case, classification cannot be effected until the lapse of time has cleared up the diagnosis; but by estimating its acuteness, the case can be classified at once. The disadvantage of separating cases of general paralysis from one another, and apportioning them in different classes, is not only easily surmounted, but is attended by positive and great advantages, as I will show directly; and, in any case, it seems to me as important, and as useful, to be told that a case of acute insanity is one of general paralysis, and that we must look elsewhere for other cases of general paralysis; as to be told that the case is one of general paralysis in the acute stage, and that we must look elsewhere for other cases of acute insanity.

I have already declared that, having made the primary groups of non-congenital insanity according to the intensity of the symptoms, we are at liberty, and are even obliged, to characterise the subsidiary groups by the symptom that predominates. Applying this principle, we obtain the following sub-classes of acute insanity:

- Stuporose;
- Resistive;
- Exalted;
- Excited;
- Depressed.

To these might be added, if it were considered expedient, a sexual and a religious sub-class. But as morbid sexuality runs through the whole class, and as morbid religious fervour is seldom a predominant symptom, it seems scarcely necessary to make special groups to contain such cases.

Now, to distinguish the general paralytic from the non-general paralytic cases, it is easy to make a new co-ordinate

axis, and to head vertical columns according to the information that we desire to collect. We shall then have all cases of the acute stage of general paralysis in one column, the exalted being distinguished from the depressed, while other cases of acute insanity will be in a separate column. The table will now assume the following form :

		General paralytic.	Non- paralytic.
Acute insanity	{ Stuporose		
	{ Resistive		
	{ Exalted		
	{ Excited		
	{ Depressed		

It is at once obvious that this method of adding an axis of co-ordinates is capable of further extension. Some cases of non-paralytic acute insanity are primary ; that is to say, they constitute the first indication of insanity in the subjects of them. Others are secondary, in that they are repetitions of a previous attack, or are incidents in the course of circular insanity, or are exacerbations of a previous state of more chronic insanity.

As already stated, the advantage of a classification by axes of co-ordinates is that only one of these axes needs to be divided on a single principle. The other may be used to indicate very various attributes of the objects classified. We may, for example, use this method to bring out the proportion of cases in which exist accompaniments of insanity, either bodily or mental, such as epilepsy, fever, hallucination, delusion, and so forth. We might, indeed, extend this axis so as to bring in causation, and any conceivable attribute or accompaniment of insanity that we desired to tabulate.

It is obviously expedient, however, to keep our tables within a moderate compass, and it is undesirable to furnish the same information twice over, except in an entirely new and useful combination. Without denying the interest that would attach to the display of the type of insanity that is associated with certain causes, I think that this information, if furnished at all, should be furnished in a separate table, and that the table of acute insanity should be limited as follows.

	General paralytic.	Non-paralytic.					Accompaniments.			
		Primary.	Recurrent.	Alternate.	Exacerbate.	Total.	Bodily.		Mental.	
							Epilepsy.	Fever.	Hallucination.	Delusion.
Acute insanity	Stuporose .									
	Resistive .									
	Exalted .									
	Excited .									
	Depressed .									

By this method, several important objects would be attained. We should obtain statistics of the relative frequency of the several types of general paralysis, information which, if obtained for the last twenty years, would have enabled us to follow the change of type which has occurred in this disease. The concomitants of insanity would be taken out of the causation table, to which they do not properly belong, and be placed among their natural affinities.

We are not compelled by any canon of classification to divide cases of the next class—sub-acute insanity—upon the same principle as those of acute insanity. Nevertheless, we shall find it expedient to do so; and in this group we may go into further detail, for the number of symptoms that become predominant is greater in sub-acute than in acute insanity. We may therefore divide sub-acute insanity as follows:

Sub-acute insanity	Neurasthenic.
	Stuporose.
	Exalted.
	Excited.
	Depressed.
	Suspicious.
	Persecuted.
	Obsessed.
	Perverted.

Objection may easily be made to this table. A patient may

be both exalted and excited ; both excited and depressed ; both suspicious and persecuted ; and in so far the table is faulty. But the answer is two-fold. In the first place, the *predominant* symptom must govern the classification, and it is rarely that both features are equally predominant ; and in the second, where no predominance can be distinguished, the case may be marked, without confusion, on the line between the categories, or additional categories could be provided, if it were thought desirable, of the excited-exalted and the excited-depressed.

It would be easy to make the table more detailed. The depressed cases could be divided into the hypochondriac ; the infested, in which some parasite is supposed to inhabit some part of the body ; the personally changed, in which the bowels are supposed to be stopped or the brains taken out, etc. ; the poverty-stricken ; the unworthy, including sinners and criminals, so self-accused ; the incapable and impotent ; and so forth. Although the information thus furnished would be of interest and value from a scientific point of view, and although tables for the use of the Association alone might well be made on such a plan, it would be injudicious to burden the tables, to be recommended to the official authorities, with non-essential details.

Similarly, the information given in the co-ordinate axis could be rendered more detailed, and the hallucinations apportioned among the senses affected ; but to this the same reasoning applies. The information would be interesting and valuable for scientific purposes, but whether it would appear to the authorities of sufficient importance to be embodied in their reports, is rather a matter for them to determine.

The division of the chronic cases will be only slightly different from that of the sub-acute. Neurasthenia will come out, as will stupor, for neither of these affections can be regarded as of so little intensity as to justify their relegation to the chronic class ; while in their stead will be a sub-class of simply defective cases, in which the predominant symptom is a mere deficiency of intelligence, feeling and conduct, unaccompanied by any more positive manifestation. It is true that many such cases exhibit from time to time outbreaks of excitement, and other positive manifestations of insanity, and, if classified during such intervals, they would be placed in another class ; but such cases, during their quiescent as well as in their other

TABLE IV.—*Forms of Non-congenital Insanity.*

		Non-paralytic.							Associated conditions.										
		General paralytic.	Secondary.					Total.	Mental.			Bodily.							
			Primary.	Recurrent.	Alternate.	Exacerbate.	Continuing.		Summery.	Hallucination.	Delusion.	Mnemonic defect. ^a	Epilepsy.	Fever. ^b	Myxœdema.	Phthisis. ^c	e	e	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Fulminant (ac. delirious mania)		1	—	1	—	—	—	1	1 ^d	1	—	—	—	1	—	—	—	—	—
Acute	Stuporose	2	—	2	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—
	Resistive	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Depressed	4	12	11	2	—	—	13	2	18	—	—	—	—	—	—	—	—	—
	Excited	5	5	8	—	—	2	10	4	10	—	2	—	—	—	—	—	—	—
	Exalted	6	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—
		7	—	—	—	—	—	—	26 ^e	—	—	—	—	—	—	—	—	—	—
Sub-acute	Neurasthenic	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Exalted	9	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Excited	10	—	—	1	23	7	21	6	15	—	5	—	—	—	—	—	—	—
	Depressed	11	4	3	—	10	3	16	—	16	—	—	—	—	—	2	—	—	—
	Suspicious	12	—	1	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—
	Persecuted	13	—	2	—	—	14	16	15	16	—	—	—	—	—	—	—	—	—
	Obsessed	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Perverted	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		16	—	—	—	—	—	—	54 ^f	—	—	—	—	—	—	—	—	—	—
Chronic	Defective	17	5	—	—	2	230	54	286	—	37	5	32	—	—	—	—	—	—
	Exalted	18	2	—	—	—	5	8	13	—	13	—	—	—	—	—	—	—	—
	Excited	19	—	—	—	13	2	35	8	30	—	7	—	—	—	—	—	—	—
	Depressed	20	1	—	—	—	18	18	—	18	—	—	—	—	—	—	—	—	—
	Suspicious	21	—	—	—	—	—	2	—	2	—	2	—	—	—	—	—	—	—
	Persecuted	22	—	—	—	—	48	48	40	48	—	—	—	—	—	—	—	—	—
	Obsessed	23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Perverted	24	—	—	—	—	5	5	—	—	—	—	—	—	—	—	—	—	—
Totals			26	25	6	3	281	171	407 ^g	76	222	7	46	1	—	2	—	—	—
			486	—	—	—	—	—	486 ^h	—	—	—	—	—	—	—	—	—	—
Grand total insanity .			512	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

a. Defect of memory so great as to be unmistakably morbid. *b.* Fever is not to be registered when it can be attributed to intercurrent disease. *c.* Other associated bodily conditions, being not intercurrent disease, but organically connected with the insanity. *d.* Total acute delirious mania. *e.* Total acute insanity (non-paralytic). *f.* Total sub-acute insanity (non-paralytic). *g.* Total chronic insanity (non-paralytic). *h.* Total non-paralytic insanity.

stages, would be marked in the exacerbate column of the co-ordinate axis. For the proper allocation of such as are permanently defective only, and never exhibit more positive manifestations, we must add to this axis another column, of "Continuing" insanity, which will be found useful for other sub-classes also. The cases in which the defect is so slight that the patient might well be at liberty, and is allowed his parole, in the intervals between his outbreaks of excitement, but is detained under care because of their frequency and uncertainty of onset, can be entered in the column "Recurrent," whether at the time of the census he is excited or no, his sub-class or class being changed or not accordingly. Those who are permanently excited will, of course, be ranked in their proper class, and filed as "Continuing."

The only other item that need be referred to is the sub-class "Perverted," which appears in the previous table also. By perversion I mean to be understood all cases of disorder of instinct, whatever the instinct that is affected. It would include disorder of the instinct of self-preservation, as in claustrophobia and agoraphobia; as in suicidal conduct without manifest previous depression. It would include disorder of the reproductive instincts, as infanticidal, and abnormal sexual conduct. It would include disorder of social conduct, as kleptomania; and any other disorder of instinct which appeared to be the predominant manifestation of the insanity. The sub-class could, of course, be further divided in the table if this were considered expedient.

After what has been said, the table needs little explanation. All cases of general paralysis would of course be marked in the first column. The types would be indicated by the sub-classes, the stages by the classes, and the total would be given at the foot of the column. Thus, more information would be given about general paralysis than has been hitherto afforded.

Cases of first attack are distinguished from secondary cases, and the intensity and type of insanity in each case is indicated. Cases of recurrent insanity, of circular insanity, of mild insanity subject to exacerbation and of the same class not so subject, are distinguished, classified into types, and the sub-totals and totals given. The total of acute delirious mania is given on the first line, and that of acute non-paralytic insanity on the seventh. The total of epileptics is given at the foot of the

appropriate column. If anyone is so strangely constituted as to desire to know the number of cases of "mania" or "melancholia" he can arrive at it by adding the appropriate summaries in column 7 of lines 5, 10, and 19, or 4, 11, and 20. The chief defect is, perhaps, that the total of paranoiacs cannot be seen at a glance, but it can be readily arrived at by adding the summaries, in column 7, of lines 13 and 22. Moreover, the table distinguishes primary from secondary paranoia, which no table has done before.

The following merits may fairly be claimed for this table :

1. It satisfies the requirements of a valid classification ; that is to say : first, it covers the whole field—it includes all the objects that it is sought to classify—it finds an appropriate place, and but one appropriate place, for every case of insanity. It does not require the aid of a rubbish-heap, entitled "dementia," to receive a huddled crowd of unclassified cases. Second, it associates things which are like, and separates those which are unlike ; and third, it does not include the same case at the same time in more than one class of the same rank. I know of no other classification of cases of insanity for which these claims can justly be made.

2. It seems to me to satisfy the requirements that I have specified as needful in a classification of cases of insanity. It needs no profound knowledge for its application. It is as easy for the novice as for the expert, for the pathological microscopist, or the stock-breeding superintendent, as for the clinical alienist. It needs no skill in diagnosis. It rests upon no questionable hypothesis. It goes as far in drawing distinctions as the general state of knowledge justifies, and yet leaves no heterogeneous group undissected. It discards terms that are obsolete and ambiguous, without introducing fancy titles.

3. It gives more information, and more detailed information, than any table hitherto proposed for the purpose, without increasing appreciably the labour of compilation.

4. It has a practical as well as a scientific value. Comparison of total primary non-paralytic insanity with total non-paralytic insanity affords a corrective to the recovery rate. Comparison of total acute insanity with total insanity affords an indication of the proper ratio of attendants to patients. Comparison of total acute insanity with total sub-acute and chronic affords some notion of efficiency of treatment.

5. Lastly, it is eminently modifiable. If more detailed information is needed, sub-classes can be sub-divided or added, and new columns embodied. If difficulties arise in furnishing the information necessary to fill out the table, columns can be omitted, or sub-classes united.

TABLE VI.

In spite of Dr. Stewart's recent communication to this Journal, I think it superfluous to argue, in these latter days, that insanity is the result of a certain stress acting upon a certain organisation. I do not see how this statement can be controverted, if it is rightly understood. It appears to me self-evident, and I shall, therefore, not expend time and space in endeavouring to establish it; but as it appears that it is not always understood, I will try to state it as plainly as I can.

My position is that insanity is a defect or disorder of the mode of working of the highest nerve regions; and that, if these structures perform their duties in an imperfect or disorderly manner, it is because, either their original constitution was imperfect, or their working is vitiated by some interference from without, or both. For my own part, I cannot see that any other source of derangement is possible; and I look in vain in the list of causes put forward by this Association, and by other authorities, for any cause that cannot be referred to one of these two classes. In congenital insanity, the first cause alone is operative. The original constitution of the organism is at fault. In non-congenital insanity, the whole fault may be in the intensity of the stress to which the organization is exposed; as in mania *a potu*, and the delirium of specific fever. But, in most cases of non-congenital insanity, the two causes co-operate. The organisation, faulty though it be, is sufficiently well constituted to perform its functions efficiently as long as the performance is easy, or as long as the organisation remains up to a certain standard. But should this standard become lowered, either from the ordinary wear and tear of life, or from the operation of depreciating causes; or should adjustments be attempted which are beyond the strength of the organisation to effect; then disorder will occur; and in such case the disorder will be partly due to the inherent defect in the organisation, and partly to the experience under which it breaks down.

Such experience I call a "stress." To apply this term to the original defect of organisation, as is done by the Statistical Committee, appears to me the degradation of a useful term, and the source of unnecessary confusion.

If these be the two distinct causes or conditions of insanity, then it is surely advisable that they should be kept separate; and it is obvious that they must, if the view that I take is correct, form the two primary classes in a classification of causes. The Committee, powerful enough to break the shackles of the old statistical tables in so many other respects, remain in this table in the old fetters. They still retain the primary division into mental causes and physical causes.

For this primary division into mental and physical, I propose to substitute defective organisation and stress; and, taking first defective organisation, it is at once apparent that such defect may be evident and plain to view in the subject of the investigation, as when he is microcephalic or exhibits stigmata of inherited syphilis; or it may be inferred, either from the existence of some defect, such as insanity or epilepsy, in one of his parents; or from some other circumstance in his personal or family history. The first division of defective organisation that we make is, therefore, according as the defect is manifest or is inferred.

The manifest defects of original organisation are either congenital, or appear in very early life; and, when they are accompanied by insanity, the insanity appears equally early. They may therefore be utilised to determine the arrangement of cases of congenital insanity; and, as they have already been utilised for this purpose, there is no valid reason for repeating the enumeration in a causation table. We will therefore discard them from our purview for the present purpose, and confine ourselves to the consideration of that defective organisation which cannot be directly perceived, but can merely be inferred.

The inquiry is consequently restricted to this question:—What are the circumstances which justify us in inferring that the organisation of any individual is defective in such a way as to predispose him to insanity? Or, if the term "predispose" is objected to, then the question is—What are the circumstances which justify us in inferring that the organisation of any individual is so defective that he may become insane under

the operation of stresses which would not produce insanity in a normal person?

The first of these circumstances is sufficiently obvious. It is the fact that the individual *has* become insane under these conditions. It is for such persons that the table is needed: it is for them that it is intended to be used. Consequently, when we find, in the antecedents of such a person, circumstances which *might* have deteriorated the grade of his organisation, we are justified in inferring that it is likely that they did so. But we are not justified in inferring that it is certain that they did so. We cannot say for certain that such a circumstance, as the existence of insanity or alcoholism in the parent, does deteriorate the organisation of the offspring, until we trace the mode of causation, or until we justify the inference by a large collection of statistics. When we find that insanity in a son was preceded by insanity in his father, we are justified in inferring the likelihood that a defect in the organisation of the father, which allowed him to become insane under the action of stress, was transmitted by inheritance to the son. But we are not justified in inferring the certainty of such transmission. It may be that a normally constituted father, after the conception of the son, was subjected to stress of such severity as to produce insanity even in his soundly constituted organisation; and that the soundly constituted son was subjected, in his turn, to a similar stress; so that there would, in such a case, be no connection whatever between the insanity of the father and that of the son. The suggestion is by no means fanciful. After begetting a son, the father may acquire syphilis, and may in consequence become subject to general paralysis. The son also may acquire syphilis, and living, like his father, a strenuous life, may also become paralytic. But it would be a wild hypothesis to suggest that the general paralysis of the father was bequeathed to his son. The facts that are gathered in this so-called causation table are not facts of causation therefore—are certainly not necessarily facts of causation. They are merely facts of sequence, from which, when the collection is sufficiently large, causation may be inferred with some confidence. Each heading introduced into the table is not a statement of causation, but a suggestion of an hypothesis. It is merely a mode of tendering advice that such statistics should be collected. When we place in the table parental alcoholism, we must be

understood not to assert that parental alcoholism is a cause of defective organisation in the offspring, but merely to suggest that it is desirable that statistics of parental alcoholism in the insane should be collected, in order that we may discover, by comparison with the alcoholic parentage of the sane, whether parental alcoholism may safely be inferred to be a cause of insanity or no. It is quite justifiable, therefore, to introduce into the table factors whose influence in producing insanity is very doubtful, in order that our doubts may be removed. Their introduction into the table implies, not that we know, but that we desire to know, whether they possess this influence or not. All we need require of the factors that we insert in the table is that there is a *primâ facie* likelihood that they may indicate defect in the organisation of the persons, with regard to whom the inquiry is made. What factors, then, shall we include?

We may fairly infer defective organisation in any individual if we find his parents, or either of them, defective. The inference is not certainly valid; but it is likely. The parental defect is not proof of defect in the offspring, but it is evidence of such defect. There is enough *primâ facie* likelihood to warrant further inquiry, which is the object for which statistics are collected, and for which these tables are framed. Parental defect may, therefore, go into the table; and, for the same reason, defect in the ancestry, direct or collateral, beyond the parents, finds a rightful place. Moreover, it is legitimate to inquire whether the parental defect is in the father or the mother; whether the defect in the remoter ancestry is on the father's or mother's side.

The next question is: What defects should be included in the inquiry? What defects in the parentage or ancestry have we reason to suppose may impair the organisation of the offspring? Insanity, certainly. Epilepsy also. Alcoholism has a double right to admission, both as indicating an imperfect organisation in the victim, which may be transmitted to the offspring; and as indicating the existence in the parent of a poison, which may, for ought we know, have a direct effect upon the sperm or germ. Phthisis and syphilis should also be included, since there is abundant evidence that the offspring of persons affected with these diseases are defective. There is strong evidence that senility in either parent is a cause of

deterioration of the offspring; and it is possible that juvenility also may have this effect; both these should therefore be included. Defective organisation in an individual may *primâ facie* be inferred from the existence of defect in other offspring of the same parents, especially in those near to him in time of birth. The integrity of his brothers and sisters should therefore be included in the inquiry.

It has often been alleged that consanguinity in the parents, even when both are normally constituted, is a cause of defective constitution in the offspring. The evidence is conclusive for such very close consanguinity as may be produced in breeding the lower animals; but, for such slight degree of consanguinity as obtains in civilised communities of the human race, it is very far from conclusive. It is, however, a fair subject for inquiry; and, since the inquiry is easily made, we may insert this query into the table. While we are making this inquiry, we might also include exsanguinity, or the union of parents of different race; though, as there are no statistics available of the proportion of such unions to the total of marriages, such an inquiry is not likely to yield useful results.

Lastly, there is a *primâ facie* likelihood that children, who are prematurely born, will be imperfectly organised.

The table will then be as follows:

		Parents.		Ancestry.	
		Father.	Mother.	Father's side.	Mother's side.
Defective organisation inferred from	Parental				
	{ <ul style="list-style-type: none"> Insanity. Epilepsy. Phthisis. Syphilis. Alcoholism. Senility. Juvenility. Consanguinity Exsanguinity. 				
	Premature birth.				
	Fraternal or sororal				
	{ <ul style="list-style-type: none"> Imbecility. Insanity. Epilepsy. Alcoholism. Congenital syphilis. Other defect. 				

The stresses to which the organisation, whether normal or defective, is subject, and whose incidence tends to produce insanity, fall into three very natural divisions. First, there are those influences which directly affect the structure or composition of the nerve tissue by immediate action upon it, such as physical injury, innutrition, and poisons. To these may be added sleeplessness, which is most conveniently included among them, though its right of admission to the group might be contested. Each of the various modes of injury is producible in several ways, and each of these ways may properly be made into a separate sub-class or heading.

The stresses of the second division are those to which the brain is subject indirectly, from its inability to cope with and control bodily changes. The function of the higher regions of the brain is not merely to actuate conduct, but also to co-ordinate and harmonise all the internal processes of the body; just as the function of a Government is not only to regulate the relations of the nation with other nations and the world at large, but to provide for police, the administration of justice, and other functions within the realm. And, just as a Government may be paralysed by the assassination or the prostration by influenza of its chief members, which is comparable to the action on the brain of direct stresses; so its authority may be suspended or superseded, in part or wholly, by rebellion and revolt within the nation. The latter disorder is paralleled by the stresses of this second kind, which include the internal commotions produced by puberty and adolescence, by pregnancy and parturition, by the climacteric, and by local as well as by these general sources of disorder.

Lastly, a Government may be overthrown, not only by revolt from within, but by external war; and similarly, the controlling and regulating function of the brain may be disordered, not only by commotion within the body, but by harmful experiences arising in the department of conduct, in the traffic between the individual and his circumstances. Such experiences may arise in any of the departments of conduct—in experiences of reproduction, of self-conservation, of family and social life, or of religion; and the stresses may conveniently and properly be divided according to the department of experience in which they arise.

Thus, stresses may be divided primarily into the direct and the

indirect ; while the latter may be redivided into the functional and the experiential. The table will then assume somewhat the following shape :—

					Principal.	Contributory.	
Stress	Direct	{	Physical	{	Tumour.		
					Apoplexy.		
					Trauma.		
					Sunstroke.		
					Meningitis.		
					Starvation.		
					Anæmia.		
					Hæmorrhage.		
					Suckling.		
			Exhausting disease.				
	Poisons	{	Drugs	{	Alcohol.		
					Morphia.		
					Other.		
		{	Bacterial	{	Syphilis.		
					Phthisis.		
					Influenza.		
		{	Auto-toxins	{	Other.		
					Myxœdema.		
				Gout.			
		Other.					
Indirect (functional)	{	Sleeplessness					
		Reproductive	{	Puberty and adolescence.			
				Pregnancy.			
				Parturition.			
				Climacteric.			
		Senility.					
		Local disease (non-cerebral).					
		Operation.					
		Courtship		Love affairs.			
Indirect (experiential)	{	Reproductive	{	Sexual	{	Marriage.	
						Sexual excess.	
						Masturbation.	
	{	Directly self-conservative	{	Fright.			
						Horror.	
						Over-exertion.	
	{	Experiences of livelihood	{	Excessive application.			
						Precariousness.	
						Failure and loss.	
	{	Social and family experiences	{	Success and gain.			
						Solitude.	
						Illness and death of friends.	
	{	Religious experiences.	{	Misconduct in family.			
						Disappointed ambition.	
						Disgrace.	

Upon the plan which I propose, then, Table VI is divided into two tables, one of which collects evidence of original

defect of organisation, the other of stress that has acted on the organisation, whether defective or not. Compared with the table of the Committee, the chief difference is that this method makes the primary division of causes into defective organisation and stress, instead of into mental stress and physical stress, the latter including defective organisation, which is not, in any proper sense of the word, a stress at all.

In the table of defective organisation, the adoption of this term and of this method, enables us to include inquiry into circumstances that do not appear in, and could scarcely be appropriately introduced into, the table of the Committee, and yet which it is desirable should be ascertained. Such circumstances are the senility, the juvenility and the consanguinity of the parents. These are not matters of inheritance. They are not qualities that can be hereditarily transmitted. But they are qualities in the parents which may well have an influence on the grade of organisation of the offspring, and which certainly should be included in a statistical inquiry into the causation of insanity. The existence of fraternal or sororal insanity, or of the other defects in the brothers or sisters that are tabulated, are certainly of great importance, yet it would be manifestly incorrect to speak of them as hereditary in the patient under investigation. They are evidence—not proof, but evidence—of defective organisation in him, and therefore should be included in the inquiry, but it is difficult to see how they could be appropriately brought into it except by the means which I propose.

For the division of mental stress into sudden and prolonged, it substitutes a division according to the department of experience in which the stress arises. The inclusion of sexual excess and masturbation in this group of stresses, rather than among the functional or the direct, may appear inappropriate, but it is obvious that these stresses arise out of conduct, and therefore are properly included in the department of experience. The table of the Committee has a department for physiological defects and errors, in which the term physiological appears to bear a peculiar meaning; for, while physical over-exertion is included as a physiological error, mental exertion is excluded from the group; and disease of all kinds, which appears to have a fair claim to the title of physiological error, is also excluded. Under traumatic stresses their table includes “injuries” as a

single heading ; but, surely, a blow on the head is causal in a different mode and in a different sense from a railway smash crushing the legs only ? And surely too, it is important under "operation" to distinguish trephining from double oöphor-ectomy ? Again, some "lesions of the brain" may surely be included also in another class, among "injuries," others among "operations," others under "syphilis," and so forth.

I should preserve the distinction made by the Committee into principal and contributory, or predominant and subsidiary, stresses. It is certainly more easily appreciated than that into predisposing and exciting. Arranged on this plan, it will be found that the principal or predominant stresses preponderate at the upper part of the table, and the contributory or subsidiary stresses towards the bottom. That is to say, causal efficiency is greatest among the direct stresses, least among those which arise out of experience. This does not necessarily mean that the number of cases in which the cause can be identified follows the same rule.

"Previous attacks" are abolished, as I think they should be, from the causation table, together with general paralysis, and appear more appropriately in Table IV.

While it is a matter of small importance whether any specific heading is admitted to or omitted from the table, and not of paramount importance whether the stresses are arranged upon the plan that I propose or on that proposed by the Committee ; it is, I maintain, of very great importance that the two objects of inquiry—the character of the original organisation, and the character of the stress that acts upon this organisation—should be kept as distinct in the tables as they should be kept in our minds. Inheritance is a cause of insanity when only it is responsible for an imperfect organisation, unduly obnoxious to the disturbing action of stress. Now, inheritance is not the only cause of such imperfect organisation, and the other causes are omitted from the table of the Association. Moreover, the influence of inheritance can never be directly observed ; it can be inferred only, and it is surely better, when we make a guess, to call it a guess, and not to put it down as an ascertained fact. By the method which I propose we distinctly avow the object of these tables of causation. The object is not, as it misleadingly appears to be, both in the existing table, and in the table proposed by the Committee, to tabulate causes of insanity that are

known to have produced insanity in the patients whose cases are tabulated. We are rarely able to indicate with any certainty what the *vera causa* may be in any given case. We find, perhaps, conditions that we know, or strongly suspect, may tend to produce insanity; and, since the patient is insane, we infer that in him they did produce insanity. But our conclusion is an inference only. We may not "conclusively presume," as the lawyers say, that a condition which may produce insanity, and which is present in a case of insanity, did in fact produce the insanity. But although we may not do this, and although we gain no more information about any individual case by including it in a causation table, we do, by the accumulation of many cases, gain very valuable corroboration or contradiction of our hypothesis that such and such a condition is causative of insanity. Let it be understood and definitely stated that this is the object of the tables—that they are not intended to be statements of what we know to be causes of insanity; but fishing inquiries as to whether certain conditions, which we suspect to be causes of insanity, are so in fact or not. Such questions we hope to determine by the aid of the statistics accumulated in these tables.

Stress Again. By CHARLES A. MERCIER, M.B.

DR. R. S. STEWART'S statement, in his paper on "Wages, Lunacy, and Crime," that he used the term "stress" *in the ordinary sense of the term* did not escape my attention, and naturally led me to suppose, until I read the subsequent part of his paper, that he meant to use the term in the sense in which it was introduced into psychiatry; and it was his departure from this "ordinary" sense which led me to make my expostulation. I desire to deprecate any notion in the mind of Dr. Stewart, or of anyone else, that I am pursuing this subject from any motive except that of clarifying our terminology from ambiguity and uncertainty. For one of my books I have chosen, as a motto, Huxley's confession: "The whole of my life has been spent in trying to give my proper attention to things, and to be accurate, and I have not succeeded as well as

I could wish"; and it is in the continued pursuit of these objects that I venture to resume the subject. No alienist of candid mind will deny that our branch of medical knowledge and art still lags behind other branches; and, while much of this retardation is due to the greater inherent difficulty of the subject, and to other causes, some of it is unquestionably due to looseness of terminology and to that inaccuracy of thought which is indicated by inaccuracy of expression. It is the appreciation of this lack of precision which has prompted me to suggest the abandonment of the terms "mania" and "melancholia," which no rigour of definition can ever now restrict within useful bounds; and with the same motive I return to the topic of "stress" as a text for the exhortation,, not of Dr. Stewart alone, but of all of us, to consider with care what meaning the terms we use will convey to our hearers and readers.

To state that we are using a term "in its ordinary sense" can scarcely be called a clear definition. It is better, no doubt, than to give no indication of the sense in which we use it, but, in the case of such a word as "stress" in a psychiatric paper, it is not much better. If we are talking about the weather, stress means *constraint* or *compulsion*; if we use the term in mechanics, we mean *elastic force*; if in relation to utterance, the *relative loudness and duration* of syllables; if in dialectics, the *importance* attached to our argument; if in law, the *process of distraining*; and so forth. Similarly, to a hosier, a *tie* is an article of dress; to a seafaring man it is the end of a topsail halyard; to a builder it is a rod or beam; to a railway engineer it is a sleeper; to a musician it means the sustention of a note; and so forth. Each of these meanings is "the ordinary sense of the term" in its particular respective context. In each context the term has a special sense, differing from its meanings in other contexts; and, in each context, the meaning should be kept precisely and exactly the same as long as the term is used in that context. If we vary the meaning while using the term in any one context, we are, in the first place, making a pun, which no self-respecting person would do intentionally; and we are, in the second place, introducing into the minds of our hearers and readers a bewilderment and confusion the counterpart of that which exists in our own. Dr. Stewart would not, I am certain, emulate that Oxford scholar recorded by Swift,

who accosted a porter, carrying a hare, with "Prythee! friend, is that thine own hare or a wig?" But when he uses, in a psychiatric paper, the word "stress" in the sense of "distress," he produces, in those who are accustomed to the "ordinary" psychiatric use of the word, a feeling of shock and bewilderment similar to in nature, though perhaps in degree less than, that produced in the mind of the luckless porter.

To Dr. Robert Jones I owe an apology for my forgetfulness of the phrase quoted by Dr. Stewart from Dr. Jones' admirable paper—a paper none the less praiseworthy for its exposition of this doctrine—which appeared in the *American Journal of Insanity*. At the time of its appearance, I read the article, as I read all Dr. Robert Jones' articles, with profit and with pleasure; but my memory is lamentably defective, and even the great satisfaction of finding so high an authority as Dr. Jones in agreement with me, as to the dual causation of insanity in heredity and stress, failed to stamp the phrase upon my memory, or to enable me to place it when I met with it again.

Clinical Notes and Cases.

A Case of Double Consciousness.⁽¹⁾ By ALBERT
WILSON, M.D.

History.

"Mary Barnes" was born in October, 1882. Her parents, who are country people, are both quite healthy, as are their other children. "Mary Barnes" had facial erysipelas when about three years old which damaged the bridge of her nose. She had an attack of scarlet fever when ten. With the exception of these illnesses she was healthy up till Easter, 1895.

The Acute Illness.

April, 1895, influenza.—The face very purple, so the mother thought it was erysipelas again. She was in bed ten days.

She got well and went on an excursion on Easter Monday.

It was fine, but east wind. She was weak, and walking tired her, so she had to rest, and she returned home sooner than she had intended. The other children said that she thereby spoiled their holiday.

Next day she played near home with other children, but came home very tired and went to bed early.

After remaining in bed two or three days a doctor was sent for, as she was so weak and ill. There appears to have been general malaise. On the Saturday she was decidedly worse, groaning with headache.

On inquiry in May I found there had been no rigor nor shivering, nor catarrh at any time. There was no aching of the bones or muscles, either in limbs or body, which threw some doubt on the influenza, judging by the type then present. It is thought that there was no rise in temperature.

N.B.—At the date 1904 there is not the slightest memory of any of the foregoing details.

In the relapse there is some reason to believe she had meningitis, though there is no evidence as to temperature, as the thermometer was never used. In the early attack before Easter Monday there was no evidence of any brain affection.

The Relapse.

The first week (April 21st to 28th).—Intense headache. The only relief was by holding the hands tight on each side of the head. She would call out "Press it, press it harder." She also had the use of a water coil. She was constantly screaming with pain day and night. She disliked light and sound, as they aggravated the symptoms. She soon lost her sight, so that she could only recognise her parents by their voices. Tache cerebrale was present. She got so weak that she was unable to sit up in bed. She was kept very quiet in a dark room. She had intense thirst and ate a number of oranges, also using a number of lemonade siphons.

The second week (April 28th to May 5th).—The pain in the head got less. It came in acute intermittent attacks. She would then be quiet in the intervals. Shaking fits developed, not rigors nor chilliness, but shaking all over. She got very weak, so that she could not raise herself in bed. She had to be fed with a spoon, and was often unable to

swallow. For two days she appeared to be dying. In fact, on Sunday, May 5th, she was supposed to be dead, and a woman was sent for to lay her out. It was found she was still alive, and she gradually revived. *N.B.*—A somewhat similar attack with collapse occurred between March 25 and April 4, 1897.

The third week (May 6th to 12th).—The pain in the head had left. Her sight was better, but light troubled her still. So she was kept in a dark room. She could, however, not yet recognise her parents by sight; but she knew them by touch, chiefly by feeling their ears. This was the *first abnormal personality*, B 1, but was not recognised as such till later. *Acute mania* developed this week. There was wild delirium with intense fear. Her facial expression was most distressing. She had fear of her parents as well as of every one else. She called people “snakes,” and said she felt them bite her. During the attacks she knew no one; sometimes she would bury her face in the pillow if anyone approached. The fear was not imaginative or that of hallucination, as in delirium tremens. She suffered from illusions, for there was always some object, as a person's hand or arm, or a fold in the counterpane, to cause the idea of a “snake” or “big black thing.” While an attack was active she developed very great strength.

The fourth week (May 13th to 19th).—The mania continued actively. This week she developed “jerking attacks” of the limbs. Evidently they were choreiform. Opisthotonos also occurred in these attacks, and she became quite livid and finally unconscious. She had ten to twenty of these attacks daily. She came under my care during this week.

The fifth week (May 20th to 26th).—The mania passed off. The choreic attacks and opisthotonos became less frequent and left entirely towards the end of the week. As the mania passed she became strange in her manner and gave names to all around. She was still in bed, able to crawl, but not to stand. She could see.

The second abnormal personality, B 2, now commenced, developing gradually. It was impossible to draw a sharp line between B 1 and B 2. Even as regards her sight there was only a gradual return to the normal. The room was kept in shade still. Though she could see a little she could not see distinctly across the room. All weakness had now gone. She

could sit up in bed and read and dress dolls or make dolls' clothes. Her intelligence was clear, and everyone thought she was recovering. She took her food well. The bowels and kidneys acted regularly. (They never acted involuntarily in the bed at any time.) She had headache intermittently, but neither light nor sound disturbed her. She had tache cerebrale. She nicknamed those around her as follows:—Her father was "Tom" or "Tom Dodd"; her mother was "Mary Ann"; her brother Fred was "George"; her sister Florrie was "The gigger" for giggler; Nurse Dowling was "The Susan Jane"; her sister Annie was "Sally"; Dr. T. was "Sam"; Dr. H. was "The Jim."

The sixth week.—B 2, or the second personality, is now quite developed. She is still in bed, strange in manner. The following curious attacks began and occurred several times a day. Whilst reading or dressing a doll she would commence shaking, first in the legs, and then all over. She would rapidly clear away everything around her and say, "It is coming." She would then turn a somersault on the bed and sit up on the counterpane, near the foot of the bed. She would call out "Holloa," and one recognised a new personality. Her facial expression was altered, being more simple and childlike. She would then address those around by the nicknames she had adopted at the close of her mania. This made me at first think this personality was connected with the mania. But subsequently I saw her change suddenly from one to the other.

Characters.—Her speech was altered. She clipped her words like baby-talk. She said "sings" for "things," etc. Her memory of all previous events was quite gone. She is so ignorant that she cannot associate names with objects. She knows in one "fit" what happened in a previous fit. The "fit" or personality would last from ten to fifty minutes, and occur eight or ten times a day. When she returned to normal, she looked dazed and cross, but this would perhaps last only half a minute. In a minute or two after she returned to normal, she would be quite herself and commence doing what she had been engaged in before the interruption, resuming where she left off, as if nothing had happened. At this time she would be normal "Mary Barnes," or as I will call it in the "A" stage, for half a day or two or three hours at a time. The least excitement, such as the doctor's visit, sent her off into B 2.

About *the sixth week*, *catalepsy* occurred. It began first in the feet and legs. She might be quite normal, "A," working with her doll, when her feet and legs would become fixed. Usually they were in extension ; seldom flexed. But this catalepsy seemed to bear no relationship to the A or B stages. It occurred in either. First a leg, then an arm became rigid. The whole body was fixed, except the muscles of the head and neck. Sometimes she would get fixed up like a ball so that she could be lifted *en masse* by any one limb ; at other times the limbs were set in varying positions. Thus in feeding herself one arm might be fixed holding the cup, or the right hand holding the spoon, or both together. By force sometimes one could make a limb yield, but it at once returned to the original position. Thus one might say the position could not be altered. She cannot bear the slightest touch, screaming with pain and fright. There is marked acute general hyperæsthesia. She calls this "bracketted " or "brackets." She relaxes in from one to ten minutes. We cannot trace the cause of these attacks during either their onset or their disappearance.

Further details of B 2.—Her memory was an absolute blank as to every detail or event of her life outside B 2. A knows nothing of B. B 2 knows nothing of A or of B 1. But B 2 in one attack knows what happened during any other B 2 period. She is very ignorant, and has to learn the names of things. Thus she does not know what "legs" means, and when I touched her legs and explained, she said, "Dese sings?" "Long sings?" When I said, "I want you to walk," she replied, "Walk! what dat, what walk mean?" I said, "Get on your feet," touching them. She replied, "Get on them things—those feet? What, feet? walk, mean get on dose sings? Can't do it." When I lifted her on to her feet she could not stand. Her knees gave way and her left foot gave also, turning outwards. In the B 2 stage she always appears paralysed in the feet. She can kneel or crawl, but not stand.

May and June, 1895.—She evidently has the knowledge of some names, but does not know how to use them. If you ask her what her nose or ear is, she argues before she understands what you mean. But if you touch the part, she understands but misapplies the name. Thus she calls her ears her eyes, and her nose her ears ; she also calls her chin her mouth and her mouth her nose, and so on. She is very lively and restless and

more chatty than an ordinary child or than while in the A state. She is very busy with books, reading and looking for N's and O's. She calls P, E, H and B, O, or sometimes every letter is alternately N and O to her. When normal as A she reads quite correctly.

It was not until June 20th, 1895, that I saw her as the normal A, "Mary Barnes"; for my ascending the stairs even stealthily, or the carriage driving up, at once sent her from the normal A to B 2. I had then seen her nearly every day for about five weeks. In the abnormal B 2 state she knows me quite well and gives me my correct name. These B 2 "fits" vary. They have been less frequent during the last three weeks, but of longer duration, and she is less dazed after they have passed. Nor does she so often turn a somersault. There is less physical or constitutional disturbance. *The catalepsy* is also less frequent. In one attack all the flexors contracted, together with the tibiales antici and postici, turning her almost into a ball.

Still B 2.

July 6th, 1895.—She has been more B 2 than A. She now returns to A only three or four times a day and remains so for perhaps five minutes up to an hour or two. When she is normal "Mary Barnes" or A, she is as well and bright and intelligent as at any time of her life. She can also read and write and stand. During the "attacks" B 2 she says she has no name, that she is "a thing" and not a girl. So we called her "a thing," as that was the only name to which she would respond. She now shows a glimmer of knowledge of the existence of A. She did not do so a month ago, so we cannot say whether this is not due to hearing herself talked about. She says "'Mary Barnes' has gone," and that she is "very cross with 'Mary Barnes' for going." She also says she "hates 'Mary Barnes' because people like 'Mary' better than herself." She still talks baby talk. Her mind is quite a blank to the names of objects. Each individual object has to be learnt by her. But she learns more quickly than say a child to whom such language would be new. It is not like teaching a foreign language. The words seem there, but the proper association is wanting. She is gradually being

taught everything afresh. She still clips her words and pronounces badly. Thus she would call a slate "a jawing skate." She cannot write except to copy. She is unable to write any word which is dictated to her, nor does she write any words or ideas that may voluntarily come into her mind. The writing centre communicates with the visual word centre, but is shut off from the word-hearing centre. Also she always writes backwards, though this is not "mirror" writing. She begins at the tail of each word, calculating enough space, usually too much. This makes the line irregular also. She writes with normal rapidity. There is no hesitancy as if appealing to the will for direction. It is quite automatic. She similarly writes figures backwards. She is still unable to stand whenever she is B 2. But if A appears she can stand. If she attempts to stand as B 2 her feet take up a position either of eversion or inversion. But when she is lying or sitting she can move them about. There is headache, so she has had a few doses of bromide. I tried thyroid, but it made her ill. She goes out every day in a bath chair and looks well.

July 20th, 1895.—There is a change working. Yesterday, whilst abnormal, either B 2 or something else, but not A, she suddenly began to walk, and walks as well as in the normal state; but in ascending stairs her legs sometimes stiffen without catalepsy developing, and then she falls. To-day she was brought to my house, and was in a very lost state of confusion. Suddenly she returned to the normal A. She smiled, and became quite modest. In the abnormal she was free and familiar. She said, "Good evening, sir," and talked quietly and rationally for about five minutes. This is the first proper interview with the normal "Mary Barnes," as in June it was but a momentary flash. She says she only remembered seeing me once before, whereas I have seen her daily for twelve weeks. She has no memory of my frequent visits to her, but she knew from the others that I went to see her. She says she knows nothing of the "attacks," of what she says or does then. They seem blanks to her mind. I took her into my stables, and she said a white horse was black and a black one was white. But she called a chestnut brown (not green, the complementary). She also called a fat pug dog thin, and was very persistent in her opinions. Suddenly she changed and put on a very annoyed expression, pouting and frowning. In a minute her features relaxed. She smiled and

again wore that childish look, and began talking baby talk. She then said "Mary Barnes" was gone, and she hated her because people liked "Mary" best.

This gradual change of July 22nd and 23rd ended on July 24th in a new personality, B 3, which lasted about a fortnight. This is described in B 3 section. But she did not continue in B 3. She was more frequently B 2 during August, September and October. She was also more frequently normal in August. She has learned to speak better, and is not so babyish. She is more educated. B 2 is associated with the catalepsy. On August 8th she was very cataleptic, taking up all sorts of positions. Sometimes it was that of opisthotonos, or her arms were stretched out, or the face twisted and the head turned by the over-action of one sterno-mastoid. After a severe attack of catalepsy on August 8th she became deaf and dumb. This was really a new personality, B 4. For details see that section.

She was chiefly B 2 till the end of November. The intervening personalities were usually B 4, less often B 3. A was a less frequent visitor; formerly she had come every day, but from October 27th, 1895, I noted that often two or three days passed without A appearing. Lately her father found that when nursing or cuddling her she would return to the normal. So he tries cuddling her and calling persistently for "Mary Barnes." Sometimes he fixes his gaze on her, but if she won't look into his eyes this fails.

October 27th, 1895.—I noted that she was getting more educated, and that she acted more like a normal child. She sews and reads to herself. Nor does she clip her words so much. Once, in September or early October, she had paralysis in both legs for a fortnight. *Toothache*.—On this particular day (Sunday, October 27th, 1895) she was rolling on the floor crying with toothache. She had had this for some days, but refused to have the tooth extracted. To-day she agreed. Dr. Taylor gave her chloroform, and I extracted the molar. When she regained consciousness she was puzzled at the whole affair. She said the pain had gone, and she was pleased. As the late Dr. Althaus was present, I got her father to "hypnotise" (?) her and bring "Mary Barnes." She came to normal for a few minutes with the usual pleasant, modest manner. She immediately detected the gap in her mouth, and found the

blood. She was most surprised and asked how it was, for she *did not know she had suffered any toothache*, and was quite unaware of the extraction or of the chloroform. This was one of the striking features of the case—the agony of B 2 for days, while A was quite unconscious of it. She conversed with Dr. Althaus, and told him that she knows she goes into this condition, but that she is quite unconscious of it. On November 26th, 1895, B 2 left and did not return till January 11th, 1896. (For continuous detail see B 5 and B 1 sections.)

January 11th, 1896.—She has been in the interval B 1, B 1A, B 4, and B 5, only occasionally A. From December 20th, 1895, she has been chiefly B 1 and B 1A. In the first instance she went from the third week in April to the third week in May as B 1A and B 1, and then B 2 developed. The exact number of days cannot be determined. They were, however, approximately the same. She was shown at the Clinical Society on January 22nd. She kept in very good health. The normal A came pretty often. On the 25th of January she was A for an hour and twenty minutes.

In the week January 26th to February 1st she only came to A once, for ten minutes. The rest of the time B 2.

In the week February 2nd to 8th, she was only once normal for two minutes.

On February 7th she was B 1 with a tinge of B 8. (See B 1 notes.)

She *gradually* returned to B 2 on February 9th and was not normal A during the week 9th to 16th, and only twice normal for a minute or two in the following week, 16th to 22nd.

February 24th.—Seen by Dr. Savill.

February 26th.—Seen by Drs. Jones, Mickle, Bramwell, Barrett, and Mr. Barkworth. Has only once been normal in last four or five days. But her father brought “Mary Barnes” before the doctors. They all tried to hypnotise her but failed, even with the aid of chloroform. She resists, or rather is bothered and does not see the force of it. She gets very exhausted. As at the beginning when she changes from A to B 2, she looks very cross and sighs, but in a moment is pleasant and smiling as B 2. It was clearly decided then that the normal A or “Mary Barnes” knows nothing of B. *But* B 2 seems to have some idea of A. This, however, is probably what she has been told.

March 1st.—In the evening changed to B 1 and *able to walk*.

March 4th.—Changed back suddenly to B 2 and remained so till six p.m. on March 6th, when she went into B 1 for two or three hours.

On March 7th woke up B 2 and had no recollection of the mania (B 1) of the previous night.

March 6th.—From about six to nine p.m. was B 1 and in violent mania. Suddenly, in what appeared to be the middle of the attack she changed back to B 2. (For further details see notes on B 1.) She had the attack B 1 in the back bedroom, which was associated with that personality originally in April and May, 1895. But B 2 was associated with the front bedroom in June, 1895. So when B 2 personality appeared she immediately went into the front room and got on the bed. She at once showed the features of B 2. But there was no stupor or daze as in 1895. She began talking childishly, was quiet and amiable, and asked for a picture book and pencil. She wrote backwards after the style of B 2 and wrote very quickly. She seemed quite fresh and bright, though only a few minutes before she was so exhausted in B 1. She caught sight of me watching round the door and called out, "Hullo, there's the new gentleman." She said she had seen me that morning for the first time. Her memory had evidently carried her back to June, 1895, as further conversation showed. This is striking, for it shows that just at first, when she became B 2, she was thrown back to May or June, 1895. She did not resume the personality which she left at six that evening. This does not always apply. She usually begins where she left off. But to-night B 1 must have been a shock to the nervous system, and as the cycle rotated to B 2, it was B 2 of May or June, 1895, not of to-day. I proved this by asking her what clothes I had on when she saw me. She replied "A black waistcoat with green spots." In reality in June, 1895, I had on a white waistcoat with red spots. On March 6th I had on a black waistcoat. But she now reverses colours, as I tested her at once. She says she has no mouth, but calls her mouth her eyes, her nose her eyes, and so on. She settled down quietly to rest about ten p.m.

March 7th.—Woke up B 2, and had no recollection of last night, so the B 2 at 9 p.m. had been rather confused. She was A several times to-day.

March 31st.—Has continued B 2 as a rule. Very seldom A, but frequently A on 20th and 21st. On the 18th she changed for half-an-hour to B 1A, and the same *exactly* on the 27th.

Convulsion on May 5th. Menstrual?

April, 1896.—Though B 2 began with paralysis of the feet yet this condition altered as time went on. Sometimes she could walk intermittently. At other times the feet gave way more frequently. In March she was better. But in April the feet were worse. On the 18th she changed to B 3 for five days, and was not often A during that week. This attack of the 18th lasted till the 23rd, when she regained the power of walking. She was also paralysed in her *hands*. This was the first time this occurred. She was not normal once between the 19th and 25th.

April 23rd to May 5th.—B 2. Normal A for one hour on the 1st.

May 5th.—B 2 left. B 1A came (see notes of B 1A). B 6 first appeared on 6th (see notes of B 6).

May 7th to 11th.—B 2 returned. Not normal this week. May 11th, B 1A.

May 12th.—B 2 returned for a few hours and left the same day for new stage B 7. (See notes of B 7.)

May 30th to June 7th.—B 2 returned—rarely normal now.

June 7th to 13th.—B 2 came once for a few minutes and could walk (see other notes B 7).

July 6th.—During B 6, whilst being wheeled in the street, B 2 came for a few minutes.

November 1st, 1896.—Had been B 1 since October 31st with catalepsy; to-day she changed to B 2, and so continued chiefly to about December 10th, 1896. But it is a confusional type of B 2, somewhat alloyed with B 1. To-day when I saw her she talked baby talk as B 2 did at first. Then she looked cross and threw all the toys off the bed, clearing a space, and then she buried her face in the pillow and began shaking all over. Her right arm and right leg became rigid (suggesting vaso-motor constriction of branch of mid cerebral on left side, thus associating B 2 with word memory centre on left side). In a few minutes she relaxed and seemed all right again, but presently she turned a somersault on the bed. After this she had a frightened expression and tried to get away from me if I approached her. Next she wanted to see my horses, and so

slipped off the bed, going on her knees quickly to the window. She began mumbling, not articulating. She also was quite deaf, so that when I hit a tray behind her head she took no notice. Sometimes she seemed blind. She was very restless, running on her knees over the bed and about the room. After a good deal of excitement she would fall back quite exhausted on the bed. In a few minutes she would come round, but at first was so dazed that she did not know her mother nor myself. Soon she would begin chatting. This attack lasted twenty minutes. She was in a very irregular condition, showing signs of B 1 and B 2. She was like the period of May, 1895, about the fifth week of illness.

Theory.—The whole phenomena or attack suggests a vaso-motor spasm of the middle cerebral, beginning at the most distant part, the foot centre, as one would expect; then travelling to the temporal (transverse gyrus), causing deafness; then to the corpora quadrigemina, causing blindness; and finally to Broca convolution, causing mumbling.

She had four to eight of these attacks a day. These attacks had a striking similarity to those which occurred during the fourth and fifth week of the relapse—as it were the intermediate stage between B 1 and B 2, the transition period.

B 2.

November 3rd, 1896.—Toothache. Another molar extracted. Former toothache and extraction were during state B 2. This was a lower molar. We gave her chloroform, which she resented at first, and this brought on catalepsy and opisthotonos. Though my assistant tried to hold her down she rose upright on her heels (not feet), pushing him backwards. She turned red and dusky. I kept on the chloroform, hoping to relax the body muscles, but whether from respiratory spasm or exhaustion her head dropped and I thought she was dead by her general appearance. The body was quite relaxed; I pulled the head over the bed and commenced artificial respiration. She quickly recovered and became conscious at once, showing she had not had much chloroform. I drew the tooth after doing the artificial respiration.

November 12th.—Same condition. She resembles April, 1895. But she is more confused and does not know the nurse

who took charge of her then and whom in May she nicknamed "the Susan Jane." As the catalepsy was troublesome I gave her Pot. Brom. Her headache was still severe. She could not walk yet. The attacks produced so much stupor that her condition resembled one of post-epileptic confusion. She often after these attacks does not know her favourite cat (which as a rule she caresses in any stage). She is frightened of it and touches it to see what it is. In the other B 1A states she looks at it with curiosity and pleasure, but asks what it is. When she is fairly clear she makes paper flowers. She only knows me as having seen me this month. She is too ill to go out, so knows nothing of her bath-chair and never remembers having been out in the street. She is now quite amiable. She says she is "good thing" and appears to be gradually changing to this condition.

November 22nd, 1896.—She was quieter for a longer time and changing. She changed her name to "the dreadful wicked thing," and wrote a note signing herself so. This is really B 10 (see notes of B 10). It was not a sudden transition, but for two or three days she seemed to have a remnant of B 2 about her. Thus on the 24th I saw her in bed, when she was very excited, burying her head in the pillow, or jumping about and dazed. She spoke of me as the "new Jim," "Jim" being her name for the doctor when B 2. But on the other hand she resembles B 10 in that she is naughty, and pushes anyone who gets in her way. Still part of this type did occur in April, 1895. There are also deafness and incoherent muttering, thus resembling the early part of B 2.

December 11th, 1896.—Menstruated for first time on December 4th, when 14 years and 2 months old. Kept in bed. B 2 was specially liable to toothache. She also comes more frequently to the normal A, or can be brought by cuddling and calling. She remains A for from two to five minutes. She can walk, though B 2 in early days was paralysed, and as the weather is fine she goes out. She is childish, but very bright, thus different from November, when B 2 was interrupted by attacks of B 10. She helps about the house and calls herself "good thing." We thought she was not B 2 but B 6, but this proved later to be the end of B 2. B 6 is the most sensible and docile of the abnormal stages.

B 1.

December 20th, 1895.—This stage or personality had existed before in the third week of the relapse, or even from April 21st to May 19th, 1895, but was not then recognised as such. From the details about to be given, we found that the new personality was appearing for the second time. It came about in this way. Whatever personality she was in, usually *B 2*, sometimes *B 4* or *B 5*, very seldom *A*, she would run upstairs to the back bedroom and jump on the bed. She had a most strange method of lying on her back with her legs in the air, turning round and round very quickly. She would also try to walk up the wall resting on her head, and with her back to the wall. She evinced great fear and looked very wild, nor did she know anyone. They were like attacks of mania or delirium, but not so severe as similar attacks at a later period. This condition continued till January 11th, 1896, when she went into another personality, which was similar to her condition in the first and second weeks of her relapse. From about January 6th to 10th she was evidently changing, for she was dazed and knew no one, having these paroxysms on the bed. Then she became quiet and docile. To-day, January 10th, 1896, she has entered this new personality. She is deaf and dumb, so that she communicates by writing down everything. I will call this new stage *B 1A*, for it is allied to *B 1*.

B 1 a.

January 10th, 1896.—She is at times deaf and dumb. When not so her memory of the last seven or eight months is quite obliterated, and she is now living over again last April and May, the first and second weeks of the relapse. She speaks of what happened then. Thus she asks for the cold water coil for her head, which she has not seen since. But she does not show any signs of that intense headache which she suffered from then. As in that period, so now she is extremely thirsty. She must now, as at that time, have a lemonade siphon, and drinks of it to excess. At times she cannot speak, and then makes signs with her hands, imitating the pressing of the siphon tap. Just as in April and May, so now, she calls for oranges,

eating one after another ravenously. She eats as many as she can get, tearing off the peel with her teeth and throwing it anywhere, and then devouring the pulp. At no period since the relapse has she cared for oranges. She also asks for Nurse D. and others who closely attended her in the relapse.

January 12th.—She still continues the same. All is blank since the end of the second week of the relapse (May 5th, 1895). Her motor powers vary. Last night she could walk, to-day she cannot stand. She does not know my name, for I did not attend her till after this period. That is, I began attending her, on May 19th, 1895. Nor does she know Mrs. Wilson, whom she had often seen in health at their church. Nothing associated with my house does she know, as the donkey or the pug. She also calls all letters alternately N and O. This was a feature with B 2 also.

Now comes a curious lapse of memory. She says that last Thursday I ordered her a bath-chair to go out in. To-day is Monday; she formerly had an old black chair hired in the village. But to-day for the first time, according to her memory, she went out in a new chair which Mrs. Gurney Barclay had sent her. The true fact is that it is seven months or more since Mrs. Barclay gave her the new chair. She was ill in bed last Thursday, so she probably refers to some former memory, when she first had the chair and was B 1.

On the evening of the 12th she went back to April, 1895, to the very beginning of her relapse. She changed to "Mary Barnes," A, and had pains in her head, just as in that period. As B 1A she was living over the two first weeks, April 21st to May 5th, minus the intense headache. But B 1A represented chiefly the latter part of the fortnight. Now she was at the beginning of the fortnight or even a few days earlier, when she was normal A. She was, however, changing about, back to B 1A.

January 13th, 1896.—Became normal A at 3 a.m., and twice between 8 and 9 a.m. At other times B 1A. After this day she went to B 2. This rather suggests a cycle.

B 1 and B 1A.

February 7th, 1896.—She went back to the events of May, 1895. She cannot walk, and is noisy and excited (B 1). She talks about the water coil and ice cap, and of those who visited

her in April. Also about the "Doctor Jim." These events were chiefly in the first fortnight of the illness (B 1A). But a new feature develops. She says she died yesterday and was born yesterday, after she died. This probably expresses her feelings on the sensory side of the change. She had never expressed anything like this before, and later I wondered if it was a forerunner of B 8. She says she has never seen me before and does not know me. This quite fits in with April and May—as I did not attend her then. So I did not exist in her memories of that period.

February 9th.—*Gradually* changed to B 2. (See B 2 notes.)

March 1st, 1896.—Changed in the evening from B 2 to B 1 or B 1A from B 2, also having been A several times during the previous day. But she can walk. This is rather different. She is living over May, but is not maniacal as B 1A.

March 3rd.—She has now been B 1A for two days, and asks for "Doctor Jim." She says she has not seen him for two days. So her memory goes right back to April and May, 1895, when she saw him often. She apparently takes no account of the various dates intervening when she has repeated this personality. She is dazed to-day. Broke a pane; she did not understand the nature of glass and was surprised. She also put mustard in her sister's eye. She was sorry after and cried.

March 4th.—Taken out as B 1 or B 1A in the bath-chair and suddenly changed to B 2. It was in this way. She called to her sister, "Hullo, here I am again." She relapsed in a few minutes to B 1A.

On the following dates, January 11th, February 7th, and March 1st, she was B 1 or B 1A, but was in herself very ill, so I thought it might be menstrual.

March 6th.—She was B 2 all day. But about 6 p.m. she said to her father that she felt ill and wanted to go upstairs. She then ran upstairs to the back bedroom where she had been ill in May and April, 1895. She got on the bed and then started the mania in full swing. There seemed something instinctive in her selection. As soon as she got on the bed she began jumping about on her hands and knees in a most lively fashion, calling out "Snakes, snakes," and showing signs of great terror. I watched the whole attack. Her pupils were fully dilated, her face flushed, the pulse was rapid and soft; she was breathless, and occasionally stopped from exhaustion. At times she buried

her head in the pillow, in the corner of the bed, and in the angle of the walls. Then she would kneel and repeat her prayers. To touch her causes terror. She has hyperæsthesia to the slightest touch. She then calls out "A great big snake," and so on. I tried to fix her gaze, but it frightened her, and she put her hand in my face and said "Take them away." She craves for oranges and devours them like an animal. She bites off the peel, throwing it away, often at one of us. Then she swallows the pulp greedily in lumps and calls out "More, more." Thus she ate five or six, and appeared willing to go on for ever. She also calls out for "fiz." Suddenly she quieted down in the sitting attitude. Then she pulled the pillow in front of her and put a small box on the pillow. On the box she placed a book, and on the book an orange. Then she called out "Fish, fish, fish, shrimps ½d. each." She then carefully lifted pillow and all on to her head, like as if it were a basket, and called out "Fish, fish, fish, who'll buy my fish?" Then she threw it all down and got on her back with her face to the wall and worked her legs and feet up against the wall as if she were trying to walk up it. After this she was very exhausted. I now tried to rouse her by beating a tin tray with a large key. I did it very loud close to her head. But I was the chief sufferer. She did not seem to hear it at first. Then she became frightened. She seized the key and threw it away, and when I laid the tray down snatched it and dropped it down the side of the bed. So I got another, and while beating it called to her to wake up. Some of the French writers have done this successfully with somnambulists. She called out from under a pillow that she was awake. It therefore had no effect. As a rule she took no notice of anything, not even passing the hands over her eyes or shouting close in the ear. Suddenly she looked with an air of curiosity all round the room. The fit was passing off and a change working. B 1 was leaving. She said "This is not my room," and jumped on her hands and knees on to the floor and went very quickly into the front room and got on the bed there. The performances on the hands and knees were almost acrobatic in their agility. Though she ran up to bed (on her feet) she lost the use of her feet as soon as she jumped on the bed and B 1 began. It shows an association between the bed and the attack due to past memories of May and April, 1895. As soon as she got on the bed in the front room she was B 2 or

"good thing" of June 1895. (For continuous detail see B 2 sheets.)

B 1a.

1896, for half an hour each day on March 18th and 21st.

1896 (May 5th and May 6th) for a short time each day. Went back to April, 1895. Dazed and mental blank. Did not know me—"Had never seen me."

May 11th.—Living over April, 1895.

B 1 and B 1a.

July 18th, 1896.—Had an attack of "standing on her head" and delirium. It only lasted a few minutes.

August 8th.—Had another similar attack. At both these times she changed from B 3.

October 31st, 1896.—Changed gradually from B 10. Yesterday she was playing with a hoop in the street. In the afternoon she had a "bracket" (catalepsy). She went to bed well, but got up to-day with one of her old attacks of dancing and jumping on the bed, as described March 6th, 1896. This is B 1A, and mania followed, but she seemed to have signs of B 2 about her. She was quite dazed and knew no one. She had no name. When I suggested to her that she was "good thing," she became restless, wandering all about the room. When the fire was burning she put her father's boots on it and destroyed them. This a little links on to the destructiveness of B 10. She had intense headache, beating her head and squeezing it with her hands or into the pillow. This resembles the first fortnight of the relapse B 1A. After a bad attack of pain she gets a "bracket." The catalepsy is so painful that she screams with the pain. The slightest touch on the skin is acute pain. In one of these attacks (on November 1st) the feet and legs were drawn up behind over the back, and likewise the arms over the shoulders. In this way she caught hold of her toes with her fingers at her back. Though she screamed in agony, no one could help her. I witnessed one of these attacks. Sometimes a catalepsy would last half an hour. It was uncertain what personality she was in, signs of B 1 changing over to B 2. I thought the headache was chiefly on the left half of the head. She also had toothache and facial neuralgia.

November 3rd.—Her nights are good and undisturbed ; but in the daytime there are headache, catalepsy, and confusion. She resembles the beginning of B 2 in May, 1895. The catalepsy was associated with B 2 and not with B 1.

B 1.

June 26th, 1897.—Changed from B 6 to B 1 because we wanted her to go into hospital and she resented the idea. Seen by Dr. (now Sir T.) Barlow. Changed to B 3 on June 30th, 1897.

November 10th, 1897.—Changed in evening from B 6. No perceptible cause. She lost the use of her legs and got on the bed, turning somersaults and climbing up the wall. She was excited and confused, and knew no one.

November 11th.—Had a good night, but woke confused and vacant. Pupils were widely dilated, but contracted to light. The old muscular paresis returned. If raised to sitting posture, she falls over and cannot lift her head or her body. The knee reflexes are increased ; there is no clonus ; the hand-grip is weak. If roused, she knows people, and says she is the "crittur."

November 16th, 1897.—The same, but also has to be spoon-fed.

November 19th and 20th.—Went to bed helpless and stupid with muscular paresis as B 1. On the 20th she woke up well, and bright in mind as B 6. She was quite active, and jumped out of bed. B 1 and B 1A did not return.

B 3.—"Old Nick."

B 2 took about three days to change to "Old Nick," or B 3. Though previously unable to stand, she suddenly walked on July 22nd, 1895. On July 23rd she was very confused, and on July 24th we recognised a fresh personality. The new personality flew in a rage and bit her clothes. After the attack was over she was very sorry, and said that it was a naughty man, and that he only comes for a minute. This seemed like a development of the idea of Satan which she had learned as A. She said the naughty man would not bite "them things," touching her face and hands. At times she was very wild, running upstairs and

sliding down on the banisters. The parents have called this state "Old Nick," and she calls it "Nit" or "Old Nit."

She changed about a good deal during August and September; sometimes she was B 3, sometimes B 2, but chiefly the latter. She was more frequently normal in August than in July. One could only tell if she was B 2 or B 3 by the talk and general symptoms. On August 8th she changed from B 3 back to B 2.

April 18th to 23rd.—A sort of mongrel attack of B 3 with paralysis of feet and hands. Changed from and back to B 2.

July 8th, 1896.—B 3 came suddenly and B 6 left. Nick can walk, read, and write. This was the first time she had walked properly since May 31st. As B 6 she counts in French, but we found Nick did not know any French.

July 31st.—Been "Nick" all the time, except one day when she had an attack of mania. B 1 occurred only for a few minutes. This was on the 18th. She stood on her head, and also prayed for "Jim," her former doctor, to come. Nick has good health, but had toothache.

August 1st, 1896.—Went to Maldon for five weeks, and was B 3 all the time and for one week on her return home. Thus she was B 3 for two months. She was weak on her legs after six weeks' paralysis, but got much stronger at the seaside.

August 8th.—One bad attack of standing on her head (B 1), A comes only by cuddling and calling.

August 14th.—Mother ill in bed. B 3 was nursing her and was a very good nurse. Her father brought "Mary Barnes," A, for a few seconds. A said, "What, dear mother not out of bed yet." This was curious. In the normal she was surprised to find her mother in bed, while at the same time in the abnormal she was nursing her and distressed about it.

August 15th.—The next day her father took her home, and when there brought A by cuddling. She was again surprised at her surroundings, this time to find herself home, having been at Maldon when last normal and having been unconscious of the journey, being B 3.

August 18th to 20th.—Though B 3, she has lost the use of her feet.

August 22nd.—Returned to Maldon.

August 23rd to September 5th.—"Mary Barnes" comes of herself more frequently. The parents were hopeful of a radical

improvement. She would come several times a day for two or three minutes. They then noticed that she specially came when going down a particular road, so they called it "Mary Barnes" Road. Then they suggested to her that as soon as she reached the road "Mary Barnes" would come. "Nick" resented this idea, and would walk on in front trying not to hear. But in a few minutes A would turn round and run back with her arms out to embrace her father, smiling and very pleased. She would only stop two or three minutes and then frown and turn away and walk on again in front. During the first fortnight of August the chair was often required, but only twice after the 22nd. The father suggested to "Nick" that they did not want the chair, so "Nick" walked better. She was, however, getting stronger and paddling in the sea (plodding). The chair was not required till September 20th, when "Nick" left and paralysis recurred.

September 4th.—Bathed in the sea and enjoyed it.

September 5th.—Bathed again. "Mary Barnes" came several times for about ten minutes at a time, and once for one and a half hours.

September 20th (Sunday).—Home again. B 3, "Nick," left suddenly at 2 p.m. in the middle of dinner. See B 6.

September 26th.—Though B 6 now, she changed for half-an-hour back to B 3. B 6 could not walk, but B 3 walked and got her mother's tea ready.

October 16th.—Was in B 10 period, but B 3 came for half-an-hour. B 10 could not walk. B 3 could.

October 17th.—Ditto.

April 4th, 1897.—"Old Nick" returned quite suddenly. She left in the middle of dinner quite suddenly on Sunday, September 20th. To-day was Sunday, and she came back about 2 p.m. while the family were at dinner. She smelt the dinner and thought it was the one she had left. She was in bed very weak, dangerously ill, had coma and paresis, and was hardly able to swallow. This was either B 1A or B 9. But as soon as she changed she sat up in bed, surprised to find herself there, all exhaustion had disappeared and she wanted a good meal. She said to her parents, "You have been quick getting my nightgown on. What am I in bed for? I am quite well." They, however, would not dress her and were afraid to give her much food. In the afternoon she got up and walked about the

bedroom. She was very weak, not having walked since March 4th, 1897. Thus there was a physical weakness quite independent of the psychic change. She had now lost all power of drawing. I asked her to draw a picture for me and she took two days to do it, April 11th and April 12th, and then it was but a very poor production.

May 3rd, 1897.—Still B 3. Has been at Maldon for ten days. Here she strongly resists coming to A as she hates "Mary Barnes." She would not change to A, not even in "Mary Barnes" Road. When she saw Dr. Cross to-day she did not remember him, for she had been B 9 when she saw him. "Nick" is very lazy and won't do housework. She remembers nothing of the toothache or the two extractions. She knows one tooth is gone but cannot explain it. She was B 2 each time. The second time she was changing from B 1, and she does not remember Dr. W., who gave her chloroform, nor does she remember the chloroform.

Wigwam incident.—On April 10th, 1897, Mr. Barnes placed her old wigwam toy in front of her. She had this given to her on October 16th, 1896. This is detailed in B 10 section and is briefly this. While B 3 on October 16th, 1896, someone gave her this toy wigwam, which she brought up to show me. She changed in my room to B 10, dropped the toy and would take no interest in it. When B 3 returned she renewed her interest in it. Now, when she saw the toy wigwam again she said to her father, "Oh yes, I remember now; I have been here once since I went to sleep on the Sunday" (September 20th, 1896). "I went to sleep again at Dr. Wilson's." (This was September 26th, when she had the wigwam.) She really had been B 3 twice for half an hour on October 16th and 17th respectively, but apparently had forgotten it.

On May 13th she changed to normal and then to B 6.

1897 (June 30th).—Had been B 6 until the 26th, then changed to B 1. Now, to-day quite suddenly about tea-time, changed to B 3. Her expression altered, her eyes became less staring and brighter. Her mother asked, "Who are you?" and she replied, "Why, I am 'Old Nick.'" She also asked why the lamp was not alight. The reason of this was that when she left on May 13th it was lamplight.

July 1st (*see May 13th, Notes on B 6*).—Her story to me of her change on May the 13th, 1897, at 9.30 p.m. (lamplight),

from B 3 to B 6, was as follows :—She says she went to sleep that evening because her father called “Mary Barnes”; when she woke up again (to-day about 5 p.m.) there was a different tea on the table, “Tom” (her father) was gone, and it was daylight and so no lamp was lit. This corresponds with the actual facts. The curious point is that she was B 3 when her father brought “Mary.” But “Mary Barnes,” instead of returning to B 3, changed to B 6. This is not the only occurrence of this kind.

August.—Still B 3.

Saturday, August 21st.—Been to Maldon for about ten days and enjoyed bathing and learned to swim. She says she is “Old Nick Barnes.” “Mary Barnes” came very seldom at Maldon. Last year “Mary” came often, especially in one road. This year it was not so. She saw me in knickerbockers to-night, and was so upset that when she went home they thought she was going to change into another personality, which she did next day.

August 22nd.—She was still upset to-day, and drew a picture of me in the afternoon as B 3, and soon after changing to B 6 drew another one of me (which I have). She, as on May 13th, 1897, changed to “Mary Barnes,” and then, instead of coming back to B 3, went over to B 6. There was no shock to the system. Changed to B 6. B 3 never appeared again.

B 4.—Deaf and Dumb.

This personality first appeared on the 8th of August, 1895, after a severe attack of catalepsy in the B 2 state. It recurred in attacks. She takes no notice of any loud noise close to her ears. The state passes off quite suddenly. If she is long that way she talks on her fingers. We did not know that she knew the alphabet, but most school children learn it. (I myself learnt it when I was nine or ten.) Once during November she was deaf and dumb without intermission for a fortnight. She makes her thoughts known by writing. Thus she is quite distinct from B 2, who never could express her ideas in writing.

On January 10th, 1896, she was also deaf and dumb, writing everything down.

June 14th to 20th, 1896.—Deaf and dumb several times during the week.

B 5.—“Only Three Days Old.”

On November 26th, 1895, she changed for the worse. She had been paralysed in the legs for three days, so that she could not move them in bed. Then she suddenly regained the power of walking. Also she became deaf and dumb for about an hour at a time. To-day we find her memory completely gone for every event which happened more than three days ago. She says she has “only been here three days,” and that she is only three days old. She says she was “only born three days ago.” She does not know me to-day. She says she has “never seen me before.” She calls me “the Zentleman.” Another time she said she thought she had once seen me driving. She calls the flame black, and black white, reversing colours, also green red and red green. She has forgotten our donkey, and says she has never seen it. As a matter of fact she has often seen it lately and had rides on it. She calls our fat pug thin. She spells backwards quite quickly; but writes forwards. She is not ignorant like B 2 nor childish. She understands everything in the house and gives no trouble. She complains of pain in the left temporo-parietal region. This state lasted till the 20th of December.

B 6.—“Pretty Dear.” Later, “Good Creature.”

May 6th, 1896.—Changed from B 1A to B 6. Supposed to be a menstrual epoch. She is a sweet, amiable child, but quite ignorant. She is very like B 2, but much kinder, and quite domesticated and busy about the house. She has never seen me before, and has no old associations.

Changed next day, on the 7th, to B 2.

June 7th to 13th.—B 6 came several times for short periods. She cannot walk. Think menstrual disturbance going on.

June 14th to 20th.—Chiefly B 6. (Occasionally B 4 and B 2.) Loses the use of her hands for a few minutes now and then. She does not know the year or month; she thinks it is 1895. This B 6 state became permanent after 1898.

June 20th.—Severe convulsions and violent. Did not bite her tongue. Very dazed and confused after. No memory of fit.

June 21st.—Woke up dazed and confused as last night.

Knows no one except "Tom" and "Mary Ann." (See B 8, to which she changed.)

July 3rd, 1896.—Gradually fused into B 6 from B 10. Seen by Dr. Tuckey this evening. He tried hard to hypnotise her for about an hour, but failed, and she became very "hysterical," flushed, and sighing. Her father brought A, or "Mary Barnes," for about half an hour. Otherwise A has not been here for some days. She is altogether out of sorts. She cannot walk and knows no one except her father and mother. Think it is menstrual.

July 6th.—B 2 came for a few minutes in the street whilst wheeling in chair; otherwise B 6.

July 7th.—Woke up as B 6. She is very like B 2, but has not the same memories. She is confused and knows no one. However, she can walk. She said she had no name. To-day "Mary Barnes" came for a minute. She afterwards told me that she did not know who "Mary Barnes" was, but she admitted "going to sleep" when A came, but "Mary Barnes" was gone when she woke up.

July 8th.—B 6 left and B 3 came suddenly. Her father has taught B 6 to count to 10 in French. B 6 left on July 8th, 1896, and B 3 came, remaining until Sunday, September 20th. On that day, at 2 p.m., in the middle of dinner, B 3 left and B 6 came.

September 21st.—I saw her next day, September 21st, 1896. She called herself "Tom's darling" on the 23rd, whereas on the 21st she was dazed and said she had no name. In spite of that we recognised a return to B 6. She cannot read or write, is very ignorant, and has no knowledge of her visit to Maldon as B 3. She continued B 6 till October 10th, 1896. After three or four days, when she was clear, she told me how she remembered the change on the 21st. It is very striking that she spoke of "Nick." (B 3) She said, "In the middle of dinner on Sunday 'Old Nit' went away and 'Tom's darling' came. 'Old Nit' was very kind and left me half the dinner." "Nick," or B 3, ate a very good dinner, that is during the first part of the meal. But the new person, B 6, would not touch the dinner. B 6 was dazed on arrival and knew nothing, wore quite a different facial expression, and had a particularly sweet manner and a loving sort of face, whereas B 3 was a happy-go-lucky, indifferent sort of romp. B 6 was paralysed in the feet. This followed on a period of two months' walking as

B 3. B 6, or "Tom's darling," says the fire was in the bedroom when she was here before. This might refer to May or June, when she first appeared.

September 26th.—B 3 appeared for half an hour and *could walk* (which B 6 could not do). She got her mother's tea ready. B 6 left on October 10th, 1896 (for B 10?). B 6 never walked at all this time.

December 11th, 1896.—She has been B 10, but to-day gradually changed to B 6. Her memory association appears partly that of B 2, but her mannerism is like B 6. Have entered this also under B 2. She is childish, very bright and intelligent, and can walk, which resembles B 6, and she calls herself "good thing."

December 27th, Friday.—I met her returning from the church, where she had been helping her mother. When she changed to B 6 on May 13th she remembered this incident, which confirms the idea of "good thing" being B 6 or "good creature" and not B 2 "a thing."

December 29th.—She changed to B 9. From about February 20th she passed into B 6, but with confusion, and called herself "Tommy's darling." As such she was shown to the Clinical Society on February 26th, 1897. She went back to B 9, blind and imbecile, on March 14th, 1897.

May 13th, 1897.—Been B 3 till 9.30 p.m. to-day. About 9 p.m. she changed suddenly. Her father was calling for "Mary Barnes," and "Nick" left, "good creature" or B 6 coming. She is dazed and "feels funny." She says she often sees me, and saw me yesterday with my daughter, though, as a fact, she has not seen me now for ten days. I traced that she is referring to December 27th, 1896, when I met her in the street. I thought she was B 2 then, but by associated memories she was evidently B 6. (See notes of B 2, in which incident is mentioned.) It was briefly as follows:—I met her on December 27th, 1896, coming from the church, perhaps helping her mother to clean it. She now alludes to this event. It was not often that she went into the street alone. She remained B 6 till Sunday evening, December 29th, when Mr. "Barnes" put her to bed, and she changed to B 9. She now says it is Monday morning (though 9 p.m.), and she wants her breakfast, for she remembers up to Sunday evening, when a Mrs. R. and two children were at tea. She says she has just "woked up

out of bed," though it is 9 p.m.; and as she fancies it is Monday morning, she cannot understand the lamps being now lit. Altogether, waking up, not in bed but out of bed, and finding the lamps lit at breakfast-time, makes her "feel so funny." She thinks the date to be Monday, December 30th, 1896, 8-9 a.m.

May 20th.—She says she is not a little girl, but a little "crittur." She sees perfectly and walks well. She has been here some three or four months, and talks of her age as such. She cannot draw, but I pressed her to draw a little girl. She said she never knew before that she could draw. She draws better than "Nick," and burst out laughing at the picture "Nick" drew on April 11th. Her father can easily call "Mary Barnes."

June 25th, 1897.—Remains B 6. Been up to see Jubilee procession, and notes all the details. She is like an ordinary person. Saw my late assistant, Dr. W. A. Taylor, now of Perth, but says she does not know him. He attended her until February, 1896, but she had then been only B 1 and B 2, so she could have no associated memories. She is as well and strong now as any child; but all memories of any other stage are effaced, and she says it is only a month since Christmas. One sees the reason by foregoing notes. She has only been here for a month since she left in Christmas week. She says it is only January, and cannot understand why the flowers are out and the weather so warm, or why people insist that it is June. It is curious to reconcile this with the rest of her personality, which shows normal intelligence. She says she has never seen the sea, but of course heard about it, and wants to go there. She was never B 6 at Maldon.

We tried to get her to go into the hospital for observation under Dr. Althaus. This upset her; she said she was perfectly well. It made her quite ill from June 26th to 30th. When she got home from my house in the evening she fell down from paralysis of legs, and began jumping about whenever touched, however lightly (hyperæsthesia) even through her stays. There was a wild expression; she was flushed, with pupils dilated. She never knocked herself. She is quite demented, and takes no notice of her surroundings and knows no one. It is evidently B 1.

Sunday, August 22nd.—Changed from B 3 to B 6. (See notes of B 3.)

Monday, August 23rd.—Her memory carries her back to June 25th when last B 6. June 25th, 1897, was a Friday, so to-day she says it is Saturday. Yesterday, which was really Sunday, seemed Friday to her. She left B 6 on June 25th and changed back yesterday about the same hour. She said she saw me last night and that I had on dark trousers, and Dr. Taylor was with me. This is what really occurred on June 25th.

November 1st, 1897.—She has continued B 6, and there has been no special event to record. I see her at intervals. She is a docile, good child, gives no trouble, and helps about the house. All her memories are limited to the B 6 personality. She argues that she is only two years old, though people say she is fifteen. B 6 appeared first on May 6th, 1896. She may have been here momentarily without our finding out. She says she can remember two Christmas days. At Christmas, 1896, she was B 6, but she was B 2 or B 1 during Christmas, 1895. She is, however, hazy in her memory about it. She never remembers going to the seaside. (She was B 3 when at Maldon.) She says she has never bathed, and would not like to do so lest "she got drowned." She saw a dog swimming in a pond for the first time (as B 6) last Sunday, and remarked, "Tom Dodd says 'Old Nick' used to jump into the water like that."

I tried to photograph "Mary Barnes" on October 30th but failed. However, I got a photo of the temper during a transition on November 10th, when she had a fit of B 1A (see B 1 note). This B 1 state lasted from November 10th to 19th.

November 20th.—Returned to B 6. She had been quite helpless, with general muscular paresis and confusion, and so weak that she was fed with spoon on the evening of the 19th, when she went to sleep. She always had good nights. On the 20th she woke up bright and active and jumped out of bed B 6. This contrasts markedly with the previous day, when she could not lift her head from the pillow.

November 21st.—She came to see me, quite well and clear. She told me that she went to the Lord Mayor's Show the day before yesterday. The Show was on the 9th, and that night she changed to B 1A, and remained in that idiotic state ten days. She returned to B 6 yesterday, so that would be to her present personality as if the day before yesterday. I saw her twice while demented, but she did not know me. She was blank from the 9th to the 19th. She menstruated on the 16th.

March 24th, 1898.—She has remained B 6. She is “Good Crittur,” but we call her “Crittur Barnes” as we wish to educate her up to her former life. To-day she changed to a state approximating B 10. She changed back to B 6 about the 7th or 10th of April.

She re-entered B 6 about the beginning or middle of April, 1898, exactly three years after first signs of sickness, and has remained so ever since, till now, April, 1904.

May 26th, 1898.—Still B 6, or “Crittur Barnes.” The father cannot call “Mary Barnes” back now. If he does so she falls to the ground and becomes unconscious, as in a swoon or faint. I witnessed this to-day.

August, 1898.—Still B 6, “Crittur Barnes.” She wants to learn type-writing, and wishes to be independent of her parents. She seems quite capable and rational. She says she falls asleep when “Mary Barnes” comes. We are trying to educate her to believe she is “Mary Barnes.” It makes her feel very ill when we call “Mary.”

Another phase of independence presents a difficulty. She is quite perky, and says she wants a young man and will have one. She is inclined to be too friendly to young men and wishes to go out at night to look for one. There is nothing improper in her mind. However, the father let her have her way, but invited the young man into the house, and by care managed to get Mary into a more modest humour. But for a few weeks this was a great difficulty.

I saw her occasionally during the next few months and at intervals. She obtained a situation and went about like an ordinary being. But she is not strong. In 1900 I examined her again. She is grown and well developed. She says she supposes she is “Mary Barnes,” as they all tell her so, and she answers to “Mary,” but that her past life is a blank and a mystery.

1903.—If I call her “Old Nick,” or “Good Crittur,” she laughs in a foolish way and treats it as a good joke. Her manner is decidedly more foolish than it should be. Her father says she is a complete blank except for the B 6 stage; is sure she is B 6. She knows nothing of her acute illness in 1895, nor of any of the sub-stages. Nor does she remember going to school. Her father says she does not remember her old schoolfellows. She has to be re-introduced to each. Then she seems confused about them, but in a short time gets to know them. She does

not remember the teeth extractions, for she was B 2 then, nor does she remember Maldon when she was B 3. She does not remember anything of drawing the pictures when she was B 9. Her drawing now is of same style as when she was B 6. She has the wigwam toy now, but does not remember it being given to her or who gave it. She was then B 3. She does not remember my white horse which she knew as B 2. She never remembers nicknaming her two doctors, Sam and Jim, but she has been told of it. She does not remember going to Hanover Square, though she went twice as B 2 and B 9. Nor does she remember her visit to Mr. Tweedy as B 9. She remembers none of the doctors except Dr. Lloyd Tuckey, whom she saw when she was B 6 on July 3rd, 1896. Drs. Jones, Mickle, Bramwell, Barrett, and Savill saw her when she was B 2 in February, 1896. Dr. Barlow saw her when she was B 9. Dr. Cross saw her as B 3 on May 3rd, 1897, and as B 9 on February 13th, 1897.

1903 and 1904.—She does not remember Dr. Walker whom she saw as B 1, and whom she very much disliked for giving her chloroform, nor Dr. Enraght, whom she saw on January 31st, 1897, when B 9. She does remember Dr. Taylor, but only as having seen him about the time of the 1897 Jubilee, when she was B 6. She does not remember school but has a hazy idea that she has often been there with her sister, who has been teaching since she became B 6. But she cannot tell at all how old she then was. When introduced to her old school-mates or told of past events she remembers something about them but not clearly. Still she is told so many things that this goes for little. She says she remembers the catalepsy, and remembers calling it "brackets," but says "Dad" told her of them. She writes backwards with difficulty now.

She has been lady's companion, etc. But she now has neurasthenia, and soon gets tired in her legs. Her memory is bad for ordinary things, and her mind is a blank previous to 1898. She gets mental fatigue very soon, and has to have an occasional rest at home. Her parents say she is unstable and easily upset, and unlike what she was as a child.

B 7.

May 12th, 1896.—She was so incoherent that her name sounded like Adjica Uneza. She knows nothing of her illness ;

still more, her memory ends at the time when she got her first chill towards the end of March previous to the relapse. She does not know me. She cannot walk. The great feature of this stage is her keen memory for events of her early childhood. Her parents say she seems to remember everything. As one of the most striking, I noted that she remembered riding on a tram to see her father when he was in the London Hospital. This was in April, 1885, when she was $2\frac{1}{2}$ years old. She also remembered her mother being ill when she was under two years of age. Her mother then had diphtheria.

On the next day, May 13th, her memory had advanced a little. She remembered going to Loughton on Easter Monday, about ten days after her chill.

May 17th to 30th.—B 7 gradually faded. In the intervals she was B 2.

May 31st.—B 7 reappeared suddenly in the evening. B 7 cannot walk; B 2 can now walk. The same evening her father brought her to my house as B 2. An hour later B 7 appeared, so her father brought her back to my house. She then said she had not seen me before, nor had she been in that room at any time before. This is explained thus: it was the only time she had been in my room as B 7, and as to not remembering me at first as B 7, her mind is a blank as to recent events. Probably in an hour she would remember me, for it always takes some time for her to clear, and then she gets to know all about her present surroundings. She also lately has remembered many of the events of her relapse, especially the April part. So there was a gradual advance in her memory from March to May.

She remained B 7 till June 7th.

June 7th to 13th.—Variable, changing from one to another. A several times, sometimes she can walk and sometimes not. B 2 came once for a few minutes and can walk. B 7 came often and cannot walk. B 6 came often and cannot walk, which is a new feature; probably menstrual disturbances this month.

October 7th.—B 7 for five minutes, and this was the last time.

B 8.

1896 (June 21st).—Thought it might be post-epileptic confusion, but give the particulars for what they are worth. She

had violent convulsions last night. She woke up this morning quite dazed. She knew nothing and said she was only born last night, so how can she know anything? She does not know her brothers or sisters nor myself. But she knows her parents, whom she calls "Tom" and "Mary Ann." Sometimes during the day she would read, towards evening she improved. She was not unlike B 5, but had not her co-associated memories. She continued thus on 22nd and 23rd, still recognising only those whom she had seen since the evening of the 20th. She changed on the 24th and did not appear again.

The change of personality was striking, for in about five minutes she represented four personalities. She changed from B 8 to B 7, then to B 10, and from that to normal "Mary Barnes" or A, and back again to B 10.

B 9.

December 30th, 1896.—At noon changed from B 2. Had been changing for about twenty-four hours. Now suddenly paralysed and demented, when sitting on the hearth-rug.

December 31st, 1896.—She has become quite vacant, and stupid, and blind. She understands nothing. She even has to be fed. She sits quietly on the bed all day. She does not jump about as in other states. She plays with her toys, sometimes gets excited and breathes rapidly, finally lying down exhausted with her face buried in the pillow. Then in a quarter of an hour she is up again. So it goes on all day. She takes no notice of me, or of any noise I make. She keeps on calling out "picters," and scrawling with a pencil. Her speech is quite incoherent and indistinct, and limited to a very few words as "mutter," "Tom," "Picters."

January 2nd, 1897.—She has been totally blind the last two days. The eyes stare and protrude, adding to the imbecile expression. She keeps on rolling sweets on a tray, and calling for "picters." She is guided only by sound and touch, and if one holds paper to her, she grabs at it guided by the rustle. It makes no difference holding a light or anything opaque in front of her.

January 3rd, 1897.—Fancied menstrual period about, so gave quinine and iron with the object of stimulating it. (Also thyroid tabloids for some weeks.)

About two p.m. she changed and appeared brighter. We observed her drawing and thought sight had returned. She is always using the pencil, but now she is seen to be drawing accurately and stooping over the paper as if she sees. But we proved that she was blind, for if we put the hand or thick paper or a book between her picture and her eyes it made no difference. In one case the paper was moved up and she went on drawing at the foot of the paper. She did not this time detect her error. Another test was to change her pencil or reverse it so that she drew with the thick end instead of the point, or to put a mask on her. But she went on tracing the drawing just the same. Thus she was clearly tracing on paper a mental photograph of some impressions from her occipital lobe, the area of psychic vision. This is supplied by the post-cerebral artery. (Would spasm of the middle cerebral artery, by depriving the second nerve, corpora quadrigemina, and roots of third nerve of nutrition, account for the eye protrusion and loss of sight? Excessive action of cervical sympathetic would cause dilatation of pupil.)

If she got wrong she would ask for her left finger to be put on a particular part. This was not in very intelligible language, but she would show distress and we would place her finger on the point she had left off at, when she would be satisfied and recommence drawing. Thus she might want the finger on the neck so as to put on the veil, or on the nose to finish the lower part. All her pictures were the fashion pictures so common in weekly illustrated papers. She also wrote from memory—so her visual word centre was intact, stimulating her writing centre. She would write verses and the names of people she has known and things she was fond of. During the afternoon she brightened up and conversed. She has no memory of any past events or figures or letters. Thus, I said, "Write L, A, D, Y, Lady," she would write lady, but would say, "It is not L, A, D, Y, it is Lady." She knew the name or word *en bloc*, but could not spell. This seems a point.

About five p.m. she lost the power of using her pencil, either for writing or drawing. She could only scrawl. *The real "Mary Barnes" never could draw.*

January 14th, 1897.—To-day she regained her sight for two minutes about noon. She called out to her sister, "I can see you." Her sister asked, "What am I doing?" Mary replied,

"You are combing your hair," which was correct. This was a remarkable change from imbecility and blindness to the opposite. Could it be caused in the vascular spasm theory by relaxation of the spasm?

January 17th, 1897.—Continues blind and demented, sitting vacantly by the hour rolling round sweets on a tray. But last night she came four times to the normal for about two minutes each time. She could then see but could not walk. She said to her parents that she felt so well and comfortable. She also told her mother that she felt sometimes like dying and going right away. This appeared to coincide with the transitions. She calls me "the voice," and drew me a picture. She can draw just as well with a book held between her eyes and the paper. I tested her and also moved the paper, but she could always find the place by touch. This hyperæsthesia of touch did not appear at first, but has been quite evident now for some time. We cannot trick her now in drawing. Though she knows paper and pencil by name, yet she does not know what feet, legs, etc., are. She knows her parents in a vague way but no one else. I tried to rouse her. I called out, "Wake up." She replied, "Is awake." I shouted, "You are asleep." She laughed vacantly and replied, "Not 'sleep."

January 19th, 1897.—Began to menstruate but no mental change.

January 22nd.—Menstruation excessive, clots, and backache. No medicine. Yesterday came to "Mary Barnes" three times and was absolutely normal, like her real self.

January 25th.—Menses ceased. Mentally unchanged. Staring, vacant look, not a wrinkle or mark of intelligence. Quiet and docile. She calls herself "Tommy's lamb." She has not been able to stand, so I ordered her very firmly to do so, and succeeded. After this she gradually got the power of standing, and later of walking.

January 31st, 1897.—Her walking has improved. Her sight and intelligence are better. She is now only shortsighted. She can tell colour and pictures three or four inches off. But she cannot see about a room. Dr. Enraght and I tricked her in playing hide and seek after her father in various parts of the room. She thought he was calling to her from a chair close at hand, went about feeling for him, and was annoyed at missing him, as he had moved to another corner. Then we directed her to

seek him in the corner, but he moved away and she walked right against the wall and was startled. Her eyes seemed normal to ophthalmoscope. Twice when we focussed on the yellow spot she came back to normal. "Mary Barnes" appears occasionally for three or four minutes. There is time for her mother to get up to her, for she always calls for her. "Mary Barnes" sees and walks and is quite normal.

Bg is very ignorant; she says "Nothink" to every question. If asked her name she says "No name nothink," but if pressed says, "Tommy's darling, or lamb." She does not know the meaning of a horse, bird, or chair. She knows the parts of her face, but not her legs or arms. She is very dull, but amiable. She now has a good memory and notices everything around her.

February 8th.—Examined by Mr. Tweedy, who reported as follows: "I have examined Miss ——'s eyes. The media are clear, the discs and fundi healthy; the refraction of the eyes is also practically normal, there being merely a slight degree of myopia in the left eye. The eyelids were widely opened and seemed spasmodically retracted, as in cases of exophthalmic goitre. The child seemed unable to see anything at more than two feet away, but she could read words of the smallest print (No. 1, Jaeger) at about three inches from the eye. There is, however, nothing in the eye to explain the peculiar nature of her sight."

February 13th, 1897.—Saw her with Dr. Cross. She is intelligent, quiet and docile, and industrious. She gives no trouble, and can walk about though weak in the legs. Her father said she had everything to learn. In this she differs from every other personality. She even has to learn the way about the house and the arrangement of the furniture. All other personalities know their way about the house quite well. Recently she nearly fell down the cellar stairs. She was walking out of the kitchen towards them and was stopped just in time. Dr. Cross or Dr. Enraght tested the reflexes and found exaggeration of knee-jerk but no ankle clonus. Her mode of counting is very remarkable. Everything is 1,2, 1,2, 1,2, and so on. She is working in pennies and shillings. I gave her sums, 3×4 and 2×6 , so she does it on paper thus:

1 2 1 2

1 2 1 2 and then running over them says, "A shilling."

If I asked 2×8 she writes :

1 2 1 2 1 2

1 2 1 2 1 and says, "A shilling and four brownies." Sometimes it gets very complicated, but she always works it out correctly. When asked to count the observer's fingers quickly, she seized his hand and automatically, touching each finger, counted 1 2 3 4 5, then said, "No, that's wrong ; 1 2, 1 2, 1 2," and finding that did not fit, went over them again—"One two," paused, and evidently wanted to say 1,2 again. Instead she said "three, three, what's that?" Then she said "four," and, surprised at herself, added "five." It seemed as if touching the fingers had called out the automatic counting. We tried to get her to count properly four biscuits, but she only counted as before, 1,2, 1,2.

February 19th.—Yesterday, being constipated, she was straining, when she fell unconscious on the floor. She slowly regained consciousness. She understood all about the difficulty and wanted something "from the voice" (*i.e.* myself) to relieve it. But she said, "not castor oil," "nor salts." It is more than a year ago since she had the salts, so it is difficult to reconcile this with the general law of isolation in which each personality lived.

February 26th, 1897.—Shown for second time at the Clinical. She is "Tommy's darling" and "Voice's little woman." I was disappointed not to show her blind. I cannot say what she is. She has sight and she is not imbecile. Yet she is not clear like B 6 or B 2. I incline to put her as B 6 in a somewhat confused state.

March 14th (Sunday).—6.15 p.m. changed suddenly. The face altered and she became vacant. There was no affection of consciousness. She could neither hear nor speak. She was dazed and quiet. Later in the evening she did talk just a few words and chanted a song.

March 15th.—Deaf, dumb, mute, blind, and paralysed in legs. Only says "Do, do, do." Of course quite imbecile.

When touched with a plate or tray she would know there was food and would take the fork up and pick the food with her fingers (like Christison's pigeons with the cerebrum removed). This was the only way of feeding her. She had great difficulty in finding the way to her mouth. Sometimes she would get at it over her shoulder. Then she would turn

cross and call out "Do, do, do." It was found best to put the left hand to the mouth, when with the right she would feel alongside the arm till she reached the mouth.

March 17th.—Till now no change. To-day she began drawing.

March 21st.—No change from 17th, but she is very imbecile. One may shout at her and she takes no notice, while at times she seems to hear ordinary conversation. She has severe pain in the head. We thought there was some anæsthesia in the hands as she hits them with objects, such as slippers. She turns somersaults and gets very exhausted. She is very strong at times and violent. One is reminded of B 10. "Dreadful wicked creature."

March 22nd, 1897.—She is quite blind, but she draws very well, better than in January. She is guided entirely by touch and it would seem that she is more skilful than in January. Then she used to ask to have her finger put on certain points, but now she detects everything by touch without guidance. In fact we often drew a pencil line across her picture without her knowing; she would soon detect it and rub it out. Her intelligence in relation to drawing is keener than in ordinary things. Thus she draws something for her father each day and knows that her father dates each drawing. This she found out by touch. If we mixed them up and there were any without dates she would at once pick them out. She could also find out red ruled lines. This is not considered difficult. When these tests were tried one interposed a book or slate between the paper and the eyes. She seems able to tell coloured crayons by touch, though sometimes she holds them an inch or two off the eye—often she touches the cornea with a crayon. But she is not startled or pained by it, a fact which points to the existence of a certain amount of anæsthesia. She also copies by touch. This we tested accurately, writing words so that she could not see and holding a book in front of her eyes. She would feel the word with the left fingers and copy the words. She cannot write to dictation. If left to copy in her own way she puts her face almost touching the paper. But we do not think even then she could possibly focus the object. Can it be a suggestion to try to use the eyes?

March 25th, 1897.—Left off drawing and took to sewing. She would sew for hours, till in sheer fatigue the work dropped

from her hands. She takes no notice of her surroundings and has been in bed from March 16th.

From Thursday, March 25th, to April 4th she was also in bed, but we could not locate the personality. She was either in coma or semi-coma. She lay on the 25th and 26th with her teeth clenched, so that one could not get food down. On the 27th she had a fine red rash like scarlatina, which lasted two or three days, but without peeling. Then she became limp and helpless, without power in any joint; if either the head or limbs were lifted they would fall down as if the muscles were paralysed. She would remain limp in whatever position she was laid. She took no notice of anything, but if pulled about would resist. Dr. Barlow saw her in this stage on March 26th, 1897, and she roused after his examination. She took very little food, often being unable to swallow. She resisted taking a powder of Hyd. \bar{c} Cret. on 26th.

Menstruated on April 6th, lasting about four days.

On the 4th, which was a Sunday, Nurse Dowling and "Mrs. Barnes" tried for two hours to give her an enema. They failed, as she struggled so. At 1.45 she kneeled on the bed and stared at the wall with her mouth open. She did this two or three times. Nurse laid her on the pillow, as she was so exhausted, and went away. Her sister a few minutes after was in the next room and heard her call out, "What am I in bed for?" She ran in and "Mary" repeated the question, adding, "Don't you know I am Nick?" (See further notes B 3.)

The last ten days may have been either a tailing off of B 9, or a repetition of B 1A of April, 1895, when she went into a trance.

B 9 never appeared after April 4th, 1897.

B 10.

Under this heading I place all instances of lower animal instincts, such as stealing or violence.

June 24th, 1896.—She changed very quickly, in about five minutes, into B 7, B 10, and A. Then she relapsed into B 10. They nicknamed her "old persuader," and she so continued for about a week. She is badly behaved and quarrels with everyone. If she cannot get people to do what she wishes she threatens to strike them. She tries to get a stick to fulfil her

purpose. At first she appeared so only for a few minutes at a time; then continued so. Gradually after two or three days she got quieter. She also without teaching got to know more. She gradually merged into B 6. She enjoys thunderstorms. The other personalities have, when opportunity occurred, been afraid of thunder.

July 3rd.—She had quite changed to B 6.

October 10th, 1896.—She gradually changed from B 6, taking the whole day. During the change she was B 7 for five minutes. She was very bad-tempered, chasing her sister with a stick. Fortunately she could not walk properly and had to get along on a chair. Also she tries to hit everyone with a strap, looking for her opportunity. She is really very wicked. She says she has no name, but says she remembers being in bed, so she has been here before. We trace it to April or May, 1895, for at one time when in bed she was very naughty. She would send everyone downstairs with some excuse. Then she would get out of bed and hide, for the sake of the amusement of being searched for. She would also lock herself in the room. She remembered these events and says it was she who did it. At that time she had catalepsy, and this state lasted about a week in 1895, and she could not walk then. So this particular phase may be an offshoot of B 1 (which had mania) or a distinct personality.

It is purely artificial now classifying all the naughty phases as B 10. Judging from the associated memories they would seem to be an offshoot of B 1 and B 2.

October 10th to October 31st—B 10.

October 13th, 1896.—She gave me an account of herself. She said she had no name, and did not know me. In fact she knows nothing. She writes and spells backwards (like B 2). She has baby talk and cannot walk (like B 2). But she is naughty, hitting and chasing people. She knows it worries "Tom Dodd" and will make him ill and die, so she tries to give up naughty ways. She speaks French, but does not know how she learnt it. (It is only B 6 who can speak French.) She never heard of "Mary Barnes." If her father tries to bring A, she turns away and looks cross. She talks of the time when she was here as April, 1895, and says she was there in bed, and that "Jim" (the doctor) used to come and see her. "Sam" (another doctor) she hates, and said she would punch him as

he is so wicked. When she saw him in the street she shook her fist at him and became cataleptic. She knows nothing of what happened before the 10th of this October except what occurred while she was here in April, 1895. Knows nothing of A. She reads backwards, from right to left, along the whole line, making no sense. But her father taught her the proper way. On the 13th she lost the use of her hands for a few minutes, but she can walk a little, though weak on her legs.

Stealing.—She tries to steal things, and says it is all right to do so. "If people don't give you things why nick it, quite right to." When outside a shop she took an apple, but while putting it in her bath chair she saw a policeman, and being frightened put it back again. She is always threatening to steal. But she became quite penitent when told it was wrong.

October 16th.—Nick, B 3, came to-day and could walk quite well, so she walked up to my house. Otherwise as B 10, she could not walk so far. (See B 3 also.) Whilst sitting in my room B 3 left. Her facial expression altered to what it usually is at such times. She then lost the use of her feet, and her father had to fetch the chair. She changed back to B 10. She had a toy wigwam, which someone gave her an hour ago when she was B 3, and she wanted to show it to me. When she changed to B 10 the toy fell out of her hand. As soon as the confusion of the transformation process passed off, I picked up the toy and asked her about it. But she said she had never seen it before, and would take no interest. She knows Nick has been and gone, but is confused.

October 17th.—Woke up B 10, but gradually changed. Suddenly she jumped up and walked; she was B 3. This is the first time she has walked properly since September 20th, when Nick left.

October 18th–27th to 30th.—B 10 all the time, but improving. She reads, writes, and spells correctly, and walks. She says she has no name. To-day there was a thunderstorm, which frightened her and brought on an attack of catalepsy. On June 24th she enjoyed a thunderstorm. I think B 10 must have been here in April, 1895, though the parents did not recognise it as a distinct personality. Yet they corroborate the events, such as confusion, temper, hitting people, and catalepsy.

November 22nd.—She has been alternately changing from B 2 to B 10, to what she calls "the dreadful wicked creature."

November 30th.—She seems very ill, sometimes as B 10 and sometimes as B 2 (see the B 2 notes). She was brought downstairs two days ago as quieter and had fewer attacks. She is now very destructive and puts everything in the fire, such as slippers, etc. She has regained partial use of her feet, being able to walk for a few minutes at a time, but is very weak. When I went in to-day the excitement made her drop off her chair, turn a somersault on the floor, and go all into a lump on her face and knees. I lifted her *en masse* and rolled her on to her side. But any touching or moving hurts her. When she recovered consciousness she was dazed. But I spoke encouragingly and made her smile, then told her to stand up and she did so. She then began talking baby-talk like B 2.

December 2nd, 1896.—Cannot say if she is B 2 or B 10—probably B 2. When calm she can walk, and sits for two or three hours at needlework or drawing, writing, or reading, and calls herself “Nothing.” This is like B 2. Then the destructive fits come, and she calls herself “the dreadful wicked creature.” Then she goes through an attack thus:—She falls off the seat, becomes cataleptic with intense hyperæsthesia, screaming with pain and fear. She is deaf, and no beating of the tray attracts her attention. Also destructive, throwing small things in the fire. When I thought she was deaf, as so she appeared, I told her mother to slap her if she was naughty and destructive. When her father came home she told him of this and was very cross with me.

She menstruated for the first time on December 4th and was kept quiet in bed. She gradually changed to B 2. Her physical condition probably accounted for the confusion and apparently mixed conditions of the past month of November, 1896.

March 24th, 1898.—In the evening she suddenly changed from B 6. She seemed strange in the evening and vacant and quarrelsome. She says she is “Nobody” and “Nothink”—everybody and everything is negative. But she has seen me before. If I call her “Mary Barnes” or “good crittur” (B 6) she strikes out with annoyance.

March 31st.—She calls everyone names, a “cat” or a “varmint,” etc. She is quite imbecile and bad tempered. She has paralysis of the legs. She draws a good deal, but not like B 9. She changed gradually to B 6 about a week later.

DATES OF ABNORMALITIES.

A—Normal.
 B—Abnormal.
 B 1—Mania.
 B 1a—Coma, cephalalgia, etc.
 B 2—Childish, "a thing."
 B 3—"Nick."
 B 4—Deaf and Dumb.
 B 5—Only three days old.
 B 6—"Good creature."

B 7—"Adjucia Uneza."
 B 8 P—Only born last night.
 B 9—Blind and draws.
 B 10—Various degeneracies, probably
 connected with B 1 and B 2.

The first appearance of any personality
 is underlined.

Details of A on a separate sheet.

When no date personality is continued from last date.

1895.
 Easter Influenza
 Relapse
 April 21 to May 5 B 1a
 May 6—19 B 1
 May 20—26 B 2
 May and June to
 July 23 B 2
 July 23 changing B 3
 July 24 to Aug. 8 B 3
 Aug. 8 B 4 and B 2
 Aug. and Sept. B 2
 Oct. to Nov. 2 B 2
 Oct. 27 First tooth extrac-
 tion, B 2
 Nov. 2—16 B 4
 Nov. 16—26 B 2
 Nov. 26 to Dec. 20 B 5
 Dec. 20 to Jan. 12
 or 13, 1896 B 1 and B 1a
 1896.
 Jan. 10 B 4 and B 1a
 Jan. 12 or 13 B 1 and B 1a
 Jan. 13 to Feb. 7 B 2
 Jan. 25 Shown at Clinical
 as B 2
 Feb. 7—9 B 1 and B 1a
 Feb. 9—22 B 2 seen by Dr.
 Savill
 Feb. 26 B 2 seen by Drs.
 Jones, Mickle,
 Bramwell and
 Barrett
 March 1 to March 4 B 2 changing to B 1
 March 4 to March 6 B 2
 March 6 B 1

1896.
 March 7 to April 18 B 2, B 1a for half
 an hour twice
 April 4 B 2, convulsions
 April 18—23 B 3
 April 23 to May 5 B 2
 May 5 B 1a
 May 6 B 6 and B 1
 May 7 B 2
 May 11 B 1a
 May 12 B 2 and B 7
 May 17—30 B 7 leaving
 B 2 coming
 May 31 B 2 and B 7
 June 7—13 B 7 B 6 B 2
 June 14—20 B 4 B 6
 June 20 Convulsions, B 6
 June 21—24 B 8
 June 24—30 B 10 and B 7
 July 3 gradually B 6, Dr. Tuckey's
 visit
 July 6 B 6 and B 2
 July 8 B 3
 Been paralysed in legs from May 31
 to July 8.
 Aug. 1 B 3
 July 18 and Aug. 8 B 1 for a few min-
 utes. Still B 3.
 Aug. 1 to Sept. 20 B 3
 Sept. 20 B 6
 Sept. 26 B 6 and B 3
 Oct. 10 B 6, B 7 and B 10
 Oct. 10—16 B 10
 Oct. 16 B 10 B 3 ½-hour
 Oct. 17 " "
 Oct. 18—30 B 10
 Oct. 31 B 1

1896.
 Nov. 1—20 B 2, second tooth
 extraction
 Nov. 20 B 2 and B 1
 Nov. 21 to Dec. 11 B 2 chiefly
 Nov. 22—30 B 1 also
 Dec. 10 or 11 B 2
 To Dec. 29 B 2
 Dec. 29 B 9

1897.
 Jan. 31 B 9 seen by Dr.
 Enraght
 Feb. 13 B 9 seen by Dr.
 Cross
 Feb. 20 Gradually B 6 ???
 Feb. 26 Shown at Clinical
 March 14 Gradually back to
 B 9
 March 25 to April 4 B 9 with coma
 April 4 B 3
 May 3 B 3 seen by Dr.
 Cross
 May 12 B 3

1897.
 May 13 to June 26 B 6
 June 26—30 B 1 seen by Dr.
 Barlow
 June 30 B 3
 To Aug. 22 B 3
 Aug. 22 B 6
 Nov. 9 B 6
 Nov. 10—19 B 1a
 Nov. 20 B 6

1898.
 To March 24 B 6
 March 24—31 to
 April 10 B 10
 April 7—10 Changing to B 6
 1904.

May Ever since B 6. She has
 been B 6 for six years. She
 changed personalities for
 three years and now has
 settled down in an abnormal
 state not her true original
 self.

NOTES ON "A" STATE (Normal).

1895.
 May 20 B 2 arrives
 A comes for two to
 six or seven hours
 several times a day
 July 6 A less frequent and
 shorter, only three
 or four times a day,
 and lasts five min-
 utes to two hours
 August 8 A more often, but
 not for longer per-
 iods
 Oct. 27 A less frequent, may
 be absent for two or
 three days. Father
 can will A back
 Dec. 20 A very irregular, per-
 haps once a day, or
 miss three or four
 days, and only for a
 few minutes at a
 time

1896.
 Jan. 13 A came at 3 a.m. and
 twice at 8 and 9 a.m.
 Jan. 18 Normal (A) lately,
 came twice only for
 a few minutes
 Jan. 26 to Feb. 1 A only once and for
 ten minutes
 Feb. 2—8 A only once and for
 two minutes
 Feb. 9—15 Not A once
 Feb. 16—22 A only twice and
 for a minute
 Feb. 28 A came four or five
 times, once for half
 an hour
 March 7 A several times, once
 for twenty minutes
 March 8—14 Frequently normal;
 her father brings A
 by cuddling
 March 20—21 Frequently A
 March 27 Seldom A

1896.		1897.	
March 29 to April 4	Seldom A	Jan. 14	A came for four minutes in blind stage
April 5—11	Not once A		
April 12—18	" "	Jan. 23	A came three times for few minutes, otherwise very rare
April 19—25	" "		
May 1	Normal A for one hour	Jan. 31	A came when blind by light of ophthalm. At other times occasionally for three or four minutes
May 2—9	Not A once		
May 17—30	Very seldom A	Feb. and March	A almost entirely absent.
June 7—13	Comes often to A. A may walk or may be paralysed	May 3	A will not come now, not even in Maldon, where came in one road. Resists her father calling
June 13	A for two hours	May 13	A came from B 3 and went off as B 6
July 3	A came for half an hour; been absent for many days	June, July and August	A almost absent now; was at Maldon, but came very seldom
July 7	A came for one minute	Aug. 22	Came once for four minutes
July 19 to Aug. 1	A comes only for a moment, and then with caressing	Oct. 30	Tried to photo A, but failed
Aug. 18	A only comes with caressing		
Aug. 23 to Sept. 5	A comes frequently for about two minutes in a particular road at Maldon		
Sept. 4 and 5	A comes often after bathing, usually for ten minutes, once for hour and a half		
Sept. 6—19	A not often		
Oct. and Nov.	A very rare and only by caressing	1898.	
Dec. 27	A comes nearly every day since the 11th for three or four minutes by herself ? from caressing	March 24	A practically gone. If A called resents it and strikes out
		May 24	When father calls, A falls down unconscious

CONVULSIONS.

April 4th, 1896.

May 5th, 1896.

June 20th, 1896.

MENSES.

1st, Dec. 4—9, 1896.

2nd, Jan. 19—25, 1897.

3rd, April 2—6, 1897.

After this fairly regular.

Often very ill about the beginning of the month, thus:

Jan. 11, 1896.

Feb. 7, 1896.

March 1, 1896.

Very ill in herself for the past nine months before appearance of menses.

THIS interesting case would not be complete without presenting some of the drawings and specimens of varying handwriting. I received a good many letters during different personalities, and append below copies of the same. They illustrate a great variation of mental type, and the spelling varies according to the intelligence of the personality. They are arranged according to the personality, and then in order of date, so that there is not exact chronological order of the whole.

B 1.—In B 1, or the mania stage, she was too ill to write. But the first letter in the series was written when the mania of B 1 was overlapping the ignorant child, B 2. She was in B 1 on October 31st, 1896, and changed to B 2 on November 1st, 1896.

B 2.—This letter was written backwards, as B 2 used to write when she first arrived in May and June, 1895. It shows the excitable temper of B 1, and refers to the period of March and April, 1895, when she was attended by a doctor whom she nicknamed "Jim." At this period B 2 had not developed, and as the associations are those of B 1 it is quite reasonable to call it a type of B 1.

My dear old jim

you may expect a good old blowing up for not coming to see me today i was going to give you a grape but I wont now because you are a very wicked boy not to come and see me

good thing

The letter dated January 28th, 1896, was written forwards, as may be noted by the two corrections. The composition is quite childish.

My own dear farser,

ou is de versy best darlint in all de weald dere is no vone in de weald like you ou is doing to have a bath vitch I hope ou vill enjoy ve did go to see de dear doctor Vilson and lady Vilson but dey was jist doing out so I could oney just peak to dem Goodbye my dardint

ou's oving ittle

daughter Good SHRINE.

The letter of March 18th, 1896, was written backwards. It is not so childish either in spelling or substance as the previous one. But it is the product of an ignorant and uneducated being. Reference to a photograph of the letter, Fig. 1, demonstrates the very bad handwriting.

the nice doctor
 if you is coming to see me to gt night i wull be good if you do t not
 hit a fing on me you was a bit naughty when you did that you
 know old jim did not do that. the dear tom and mary ann say
 you is a nice man and i say you is and every body else

The letters "gt" before "night" show that she wrote backwards and omitted the "h," so she began again. The same applies to the "t" before "not."

In February, 1897, she changed from the blind stage, B 9, to B 2, and wrote the following letter :

For the new jim or rather the gentleman who says he is a jim and who says he is jims brother but he is not because he has not got a gammy leg and my jim was only a lean short man and this one is a big tall man

good thing to Jim

"Jim" was the doctor before April 21st, 1896, which was also before B 2 developed. But it was in B 2 that she gave him the nickname, so probably she had been B 2 without being recognised.

B 3.—The next group of correspondence represents the B 3 or "old Nick" personality. As such she appeared as a bright, fairly intelligent child of about ten years of age. Her handwriting was good and normal, and allied to that of B 6 or "good creature," the phase in which she now exists.

[Postcard to her father, August 7th, 1896.

_____,
 Maldon.]

My Pet

I wish you would bring those oil skins down with you as we have spoken to a boatmen about them and he knows how to cure them and will be glad of them Mr. Hanley our boatman
 Goodbye dear I shall soon see my darling God bless him

Old Nick

[August 26th, 1896.]

Maldon, Essex.

Dear Sir,

Just a line to tell you I am not in [London] but at Maldon with my dear old Tom.

I am very sorry I did not write you the Post card you asked me to but I went away on the Saturday and quite forgot all

about it but I know you will forgive me and I hope this will do as well.

The dear doctor Wilson I am enjoying myself lovely with boating bathing and paddling going on.

The dear old Tom and me are just going out to get the dinner so I have not any more time to say any more but I remain

Your ever loving

Old Nick.

in Haste.

[Received in Paris April 6th, 1897.]

[London]

In Bed

3 hours after I woke up

My dear Dr. Wilson

I am writing you a few lines to let you know Poor old Nick has woke up I will tell you all about it I woke up all at once at about $\frac{1}{4}$ to 2 o'clock & found myself in bed with the room all dark & with my night dress on & with bottles on the drawers & all kinds of things that people would have if they were ill. I was all by myself & the place dreadfully quiet so I called out "Why have you put me in bed" then I really had to laugh till the tears ran down my cheeks because it was so strange and funny. Then Tom & Munger & Giggler came in all looking dazed and Frightened & I was so surprised that we did not know what to say for quite a little while. Do you know I felt so strange because I went to sleep in September and now they tell me it is April 1897 instead of September 1896. I cant make it out I dont know that I can believe but that it is the same day as when I went to sleep because you know I went to sleep on Sunday at the same time as I woke up. I went to sleep you know when we were having dinner one Sunday & I woke up on sunday when they were having the same dinner you know Mutton & Potatoes & greens all the very same except Fruit Pudding it seems so funny to go to sleep such a very long time Every thing was the same except I was in bed all cuddled up in wraps & Hot water bottle at my feet & every think so funny. I feels quite strong & cannot make out why I am in bed. But I am going to get up tomorrow I feel so very disapointed you are away but I hope very much you are enjoying your self & that you will soon behome because I have gallons of news to tell you.

I have done you a drawing and I am sending it to you with 2 of the others that another critter tom Tells me did for you while I have been asleep I will tell you that there are a whole Pile of Drawings here that she has done for you & there are 2 beautiful Pictures here that she has done for you Proper Pictures I mean with ladies & Birds & Trees & Fence all colored in too you know. I have a little more to tell & that is that Mary Barnes came for a few minutes almost directly after I woke up. I think I can tell you no more until you come home

I remain your Loving little Friend

Poor old Nick

_____,
Maldon,
Aug. 12th, 1897.

Dear Dr. Wilson,

I daresay you will be surprised to hear that I am in Maldon and am enjoying myself exceedingly. You told me you kept the other letters I sent you so I thought I would send you another as I want to tell you how I can swim and float and dive. I go in the water nearly every day for I like being in the water very much indeed. Dear Dr. Wilson last time I saw you, you were in your carriage, and you had Mrs. Wilson with you and she had something on her eye and I want to know if she has hurt it very much and if it is better I do hope so. We have been in Maldon nearly a fortnight now and we have got to go home at the end of next week.

Hoping you are quite well

Your sincere little friend

Old Nick.

The third letter is of peculiar interest as describing her sensations in passing from one personality to another.

B 4 and B 5 never wrote anything.

B 6, "good creature" or "critter," was more highly educated and intelligent than B 3. She shows it both in her handwriting and her composition. The first letter, dated June 2nd, 1898, is of special interest read in conjunction with the last letter of B 3, written on August 12th, 1897. In the latter she describes her happy holiday at Maldon; whilst in the new personality in June, 1898, she shows an absence of memory for her former visit. This demonstrates the different memories, and, in fact, lives, of the separate personalities.

_____,
Maldon,
2nd June [1898].

Dear Dr. Wilson

I am writing you a letter to tell you how I am enjoying myself in Maldon. It is such a glorious place I have never been to such a lovely place before. [See B 3's letters of Aug. 26th, 1896, and Aug. 12th, 1897, written from Maldon.]

We are having such dreadfully bad weather here, we have hardly had a fine day yet, and it is that bitterly cold here, that I have not been able to bathe.

Tomadod said that if I went in perhaps I should have a very great breckart and then get drowned so that he could never see me any more. I have not given up all hopes of going in the water yet as Munger says that if a very very warm fine day was to come she would let me go in I should so love to go in because I

believe I can swim and yet cannot be quite sure until I have tried. Dear Dr. Wilson I have enjoyed myself so much this Whitsun for on Monday we went out all day to a beautiful place called Mill Beach and on Tuesday we went for a drive but it came on to rain in the afternoon very badly I think this is all I have to say so

Goodbye your ever loving little friend

CRITTER BARNES.

Maldon,
Essex.

July 20 [1898].

Dear Dr. Wilson,

According to promise I am writing to tell you that I am enjoying myself immensely. I go to bathe every day and Dad tells me that I swim very nicely, and I can swim on my back as well now.

I think this is all at present. I have lots to tell you when I come home so good-bye.

I am your

OLD CRITTER BARNES.

In the letter of August 12th, 1897, written by B 3, she describes how she can swim and dive.

When she went to the sea in 1898 she was B 6 and could not swim, and was afraid of the water (see letter of June 2nd, 1898).

This, again, shows the difference in capabilities of the various personalities.

The next two were also written by B 6.

[Postmark August 6th, 1898.]

Maldon,
Essex.

Dear Dr. Wilson,

Just a few lines to let you know that I have not returned from Maldon, and that I am still enjoying myself immensely.

I must tell you that I can ride a bicycle, and that I learnt to ride in about two hours. I have had several tumbles, but do not mind in the least now that I can ride. I enjoyed myself very much on Bank Holiday Monday, for there were grand doings here, a Military Tournament and Water Sports, and in the Water Polo Match the Umpire was turned completely out of his punt and was obliged to swim ashore, it was a jolly day.

I think this is all at present so good-bye.

I am your little friend

CRITTER BARNES.

Dear Dr. Wilson

I daresay you will be very much surprised to hear that I am staying in Suffolk for another Holiday I daresay this will be the last this summer so I am going to stay for a fortnight

or a little over. I am enjoying myself immensely and I went blackberrying this morning and I daresay I gathered two or three lbs. I am staying with one of Mother's friends she is such a nice lady and she keeps a farm house there are plenty of Horses Ducks Chickens Pigs Bullocks. Etc and I am feeling A1 and I am getting quite a country girl I shall soon know how to feed chickens and all kinds of things. I think this is all at present so Goodbye Hoping you are quite well

I remain yours Truly

M. BARNES.

B 7 was the personality with memories of very remote date. The following writing on a bit of card showed knowledge of an event which happened before she reached the age of two. There was nothing in conversation to account for it.

March 16, 1895
 The dear old dada and Mother
 The dear old Doctor H—
 The dear old Doctor G—
 The dear old Doctor Wilson
 The dear old nurse who came
 From the union to nurse Mama
 When she had Diptheiria
 Miss Adjuica Bamed.

The actual date was May 13th, 1896, but she had shifted back to a former personality. The handwriting is good and distinct, the letters being well formed.

B 8 never wrote anything.

B 9, the blind and imbecile personality, wrote the following in February, 1897, when her intelligence was returning. The letter was put in a sealed envelope and addressed "The Voice," which was then my nickname. The handwriting is demonstrated in Fig. 3.

Februgesy the fourteenth
 18 ninty seven
 Sunday

The dear voice I am writing a letter to tell you lots of things you come to see me last night and I was so jedfulls pleased and I did like the doctor Cross. when I went out this morning I was listening all the time to see if I could hear you but I couldnt and I shall like to go there to London soon because I like to ride quick goodby dear voice I hope I shall soon see you I am the Toms lamb and I have nearly made that sock what I showed you Goodbye dear voice

Febugesy

TOMS LAMB

B 10 is a group of degenerate personalities, rather than one type only.

I append three letters written in this stage. The first two are very badly formed scrawls and written backwards.

the dear tomadod just a line to you to tell you how much I wish you was here. I hope there is something in your pocket to night I remain yours truly

I dont know who I am so I cant Put my name

My dear tom

I have just got up. I hope you are not worried. I shall be glad when you come home so you can give me some browns.

Both these letters were addressed to her father, whom she called "Tom" in every abnormal personality, and they were both written on the same day, October 12th, 1896.

The next letter was written also in a degenerate state on November 22nd, 1896. She called herself "The Dreadful Wicked Creature." She had some of the associations of B 2 or B 6, and was not well defined. The writing is in a better style, and not unlike B 6.

The dear Jim

I thought I would write you just a line to let you know I really do begin to like you very much, after what you did to me three Tuesdays ago. You know what I mean when you brought that other naughty wicked man in your beautiful carriage. I can assure you I wish he was here now so that I could fight him like he fought me.

I remain Your little friend

THE DREADFUL WICKED CREATURE.

The Jim.

She called her first doctor "Jim," but here she addresses me as "Jim." She refers to another doctor who chloroformed her to extract a tooth. This was the second tooth extraction, when she was B 2, having just changed from B 1.

This memory of the tooth extraction associates "the dreadful wicked creature" with B 2. The letter was written forwards and not in the handwriting of B 2. When B 2 was more educated she wrote forwards.

I have several letters written during the past year which are quite normal in all respects. She is, however, now B 6.

The following short letter is a fair example. It was written to me in March, 1904. She now uses her proper name.

Dear Dr. Wilson,

I am writing to say that I shall be able to keep appointment for next Monday, if you will write me full particulars.

Thanking you very much for all your kindness,

Believe me yours sincerely,

[MARY BARNES]

(¹) This is a report *in extenso* of a case already published in an abbreviated form in the October, 1903, number of the JOURNAL.

Occasional Notes.

The Annual Meeting.

The annual meeting has come and gone. It has left an excellent record of work done. We could wish that the attendance had been larger. While it was representative of all parts of the country, many were absent, and we cannot regard it as entirely satisfactory that it should be left to some sixty or seventy members out of six hundred to conduct the important business of the Association, and to take part in the interesting scientific discussions which were arranged. The meeting of the British Medical Association at Oxford was specially attractive, and that no doubt had an effect in limiting the attendance at 11, Chandos Street.

We regret this all the more because the high level of attainment in the President's address and in the communications made by various members assuredly deserved a more numerous audience. Dr. Percy Smith has marked his year of presidency by a valuable critical study which is both timely and profitable.

We have no doubt that the proceedings of the annual meeting will be carefully read on account of their inherent merit, and that the business affairs of the Association will have due attention. We also trust that the discussions to be held relative to the Report of the Statistical Committee will be well attended, so that every shade of opinion may be represented. It is very important that their proposals should have adequate

you know old ym ded not
do that. the dear tom
and mary am ~~say~~ say
you do a nice man and do

FIG. 1.

This is part of a letter she wrote in the B 2 or childish stage, on the 18th of March, 1896. It is like the handwriting of a child of four, the letters being rounded and large. She wrote each word backwards. Thus she wrote an "n" for an "r" before "dear," so crossed it out and began again. Also before the word "say" she wrote a bad "ay" so wrote the word over again. Referring to the printed copy of this letter one sees "gt" written before the word "night," on account of the mis-spelling she re-wrote the word.

Dear Dr Wilson

I dare say you will be

surprised to hear that I am in

Waldon and am enjoying myself

exceedingly.

FIG. 2.

This was written on August 12th, 1897, by "Old Nick," B 3. In this state she was like a girl romp of 9 or 10. The handwriting resembles that of B 6. B 3 and B 6 were like first cousins. B 6 was more sensible and intelligent than B 3, not so mischievous and more homely. They were, however, two quite separate lives.

Februgesy the fourteenth
18 ninty seven
Sunday

The dear voice I am writting
~~you~~ a letter ^{tell} to you lots

This letter was written by B 9, a blind imbecile. It is an illiterate production as regards spelling. The writing is good, but of quite a different type to B 3 or B 6. We thought at intervals that she had a very little sight at this time, but she could write or draw equally well if a book was held in front of her eyes.

FIG. 3.

Dear Dr. Wilson

I am writing you
a letter to tell you how I am
enjoying myself in Maldon.
It is such a glorious place I
have never been to such a lovely
place before.

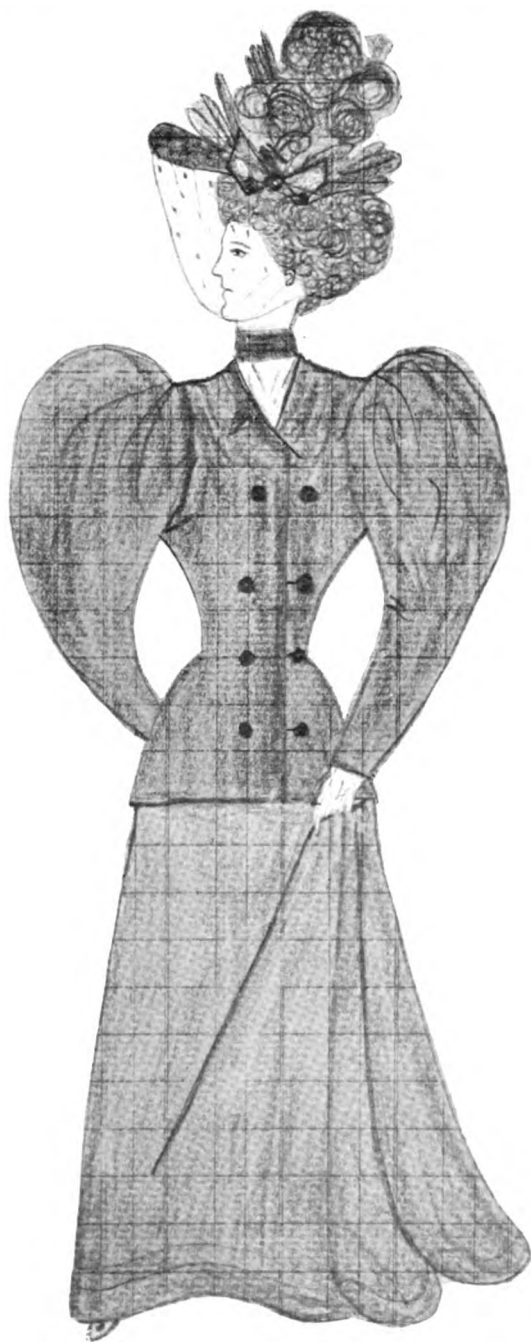
This letter was written by B 6, and signed "Good Crittur," on the 2nd of June, 1898. She resembled an intelligent child of 14 or 15. The handwriting is good, but that of a child; it is not unlike that of B 3.

FIG. 4.

my dear tom
 I have just got up
 I hope you are
 not worried.
 I shall be ~~glad~~
 glad when you come
 home so you can
 give me some
 browns

The date of this letter was October 12th, 1896, when "Mary Barnes" was in the B 10 stage. B 10 was a degenerate state, and the handwriting is characteristic of such. The spelling is bad, and the crooked lines and ill-formed and scratched out letters and words show a very low state of intelligence and education. Each word was written backwards: this can be demonstrated by observing the "re" before "give." She wrote an "r" instead of a "v," also the "m" before "browns" was written in mistake for the "n," and is therefore crossed out. But here also she writes "brown" for "brownies," the name she gave to pennies, so she adds an "s" after it. Note that the "s" is disconnected. "tom" was the nickname she applied to her father. Sometimes she miscalculated distances, as where she runs the word "brown" into the "m."

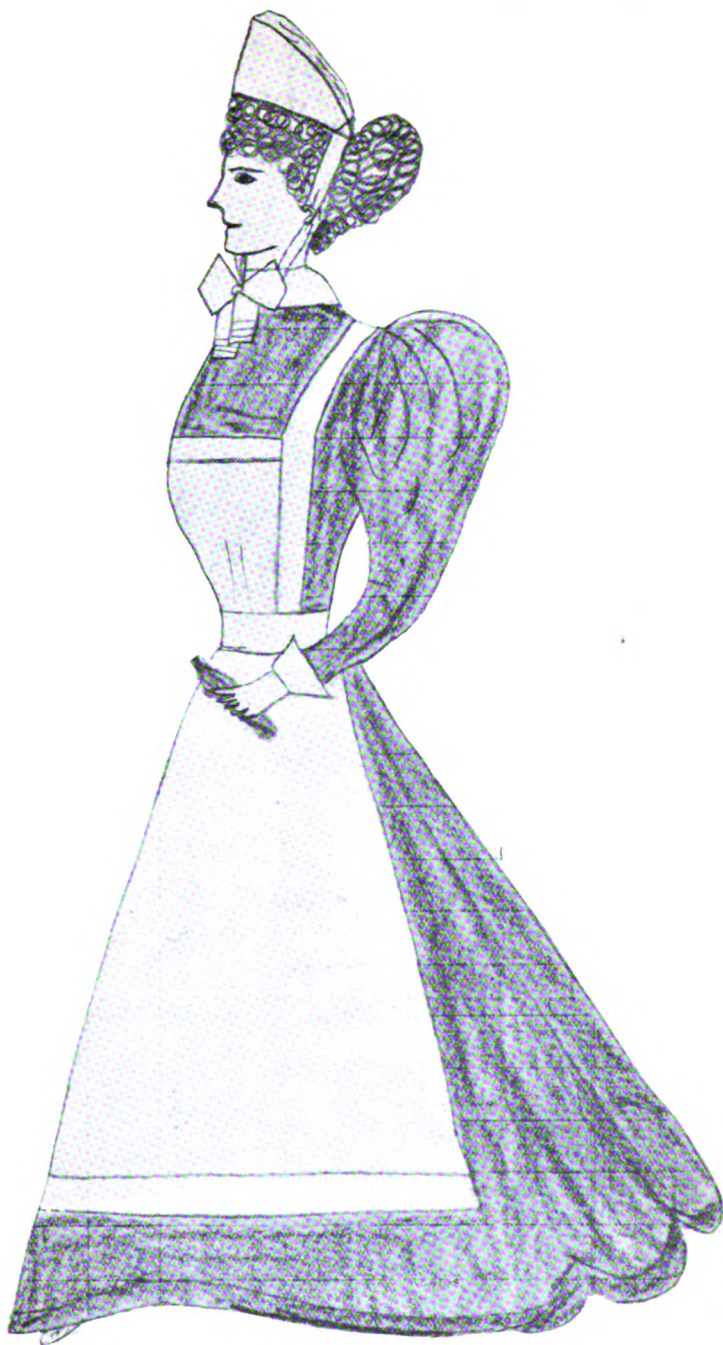
FIG. 5.



This was drawn on the 20th of March, 1897, by B 9, when she was blind. It made no difference to quality or speed if a book was placed in front of her eyes. This is one of her most artistic productions.

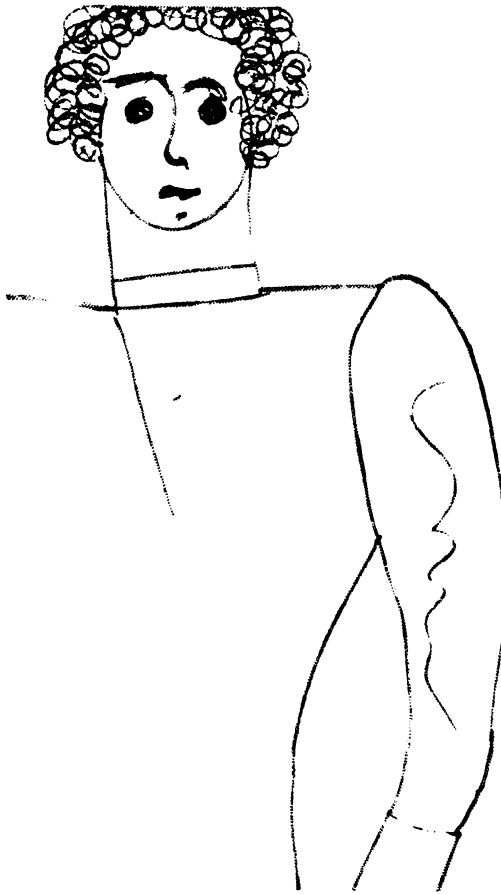
FIG. 6.

Bate and Danielsson, Ltd.



This was drawn on the 22nd of April, 1897, by B 9, during her second attack of blindness. She was quite blind, but, in addition, a book was frequently placed between her eyes and the paper. Though the paper was moved, she always found the place again quite easily by touch. So acute was her touch during the blind stage, that if a pencil mark was made across her drawing she would discover it at once and rub it out. This was drawn for the nurse, and so she drew a nurse in costume. Nurse asked her to draw a bottle in her hand. B 9 was very stupid, and understood very little. She did not know what a bottle was, so a bottle was placed in her hand, and, feeling it with her left hand, she drew it in with her right.

FIG. 7



This was drawn by "Old Nick," B 3, on the 11th and 12th of April, 1897, after B 9 had made those exquisite drawings. "Old Nick" took two days over it and was much amused at herself for having drawn so comical a picture.

"Mary Barnes" was never able to draw.

FIG. 8.

deliberation, for their labours have been protracted and arduous, and the results must stand for the guidance of psychiatry for many years to come.

The Management of the London County Council Asylums and the Horton Asylum Scandal.

The history of asylum management in England yields no example of so scathing a condemnation as that passed by the jury and judge in what has attained such widespread notoriety as the Horton Asylum scandal.

Four employés of this asylum were indicted at Guildford, on July 19th last, for conspiring to steal the property of the asylum, the jury⁽¹⁾ finding them guilty and expressing the opinion that the Horton Asylum "had been grossly mis-managed," and "that the conduct of those responsible for the administration ought to be seriously inquired into." The judge in passing sentence is reported to have said that the gross mismanagement of the asylum enabled him to take "a lenient view of the conduct of the prisoners." "There was no proper control or supervision in the asylum."

The judge is further reported to have remarked that the statement of a witness, that there were twenty-six persons included in the malversations, "was possibly true," and added that "it might be that the whole management of the asylum was criminal from top to bottom."

The evidence of mismanagement elicited at the trial must have been most convincing for so careful a judge as Justice Darling to express so damaging an opinion of the state of the asylum, and of this having been brought about by the system of control of the London County Council. The judge's allusion to leniency in sentence certainly points to his regarding the management, however innocent in intent, as more or less causative of the crime.

The plea of one prisoner probably had considerable weight with the judge. This man stated that "they never liked to have a lot of over-stock, and that it was usual to get rid of the over-stock"; that "he had seen barrels of limejuice and vinegar poured into the drains," and "a ton of granular sugar

melted down in that way"; that "seeing such a waste, he thought there was no harm in taking some of the things for himself."

These statements must, of course, be received with caution, but it is doubtful whether they are absolute moonshine, as the counsel for the prosecution suggested, and they evidently were not so regarded by the judge.

It is to be regretted that inquiry was not made in regard to the reasons for the objection to over-stock. It has been suggested that this was due to the fact that the supplies of the various asylums being estimated beforehand to the central authority, any erroneous estimate entailed so much unpleasantness with the central authority, that this was the reason for the destruction of the surplus. It would be of interest to know if this is the true explanation.

The judge also commented on the fact that the man in responsible charge received only £200 per annum, but it must be remembered that in ordinary county asylums this is not an especially low salary; in these asylums, however, the store-keeper, etc., are under the direct supervision and control of the medical superintendent. It does not appear that the medical superintendent had any real power or authority to supervise the persons in charge of the stores, etc. This, if a fact, would be conclusive evidence of one great difference which exists between the management of London asylums and that of the ordinary county asylum.

The principle of government in which the London County Asylums appear to differ from similar asylums in England and Scotland is that the Committee of Management endeavour to exercise both legislative and executive functions, with the result that the former is very much in excess and the latter extremely defective.

Retaining the executive responsibility in their own hands, it becomes necessary to pass a rule to meet every possible contingency that may arise in the absence of an ever-present responsible executive. Rules and restrictions are consequently multiplied *ad infinitum*, so that the officials are swathed in red tape—and this in institutions which demand the utmost flexibility and adaptability. One of the most striking examples of this condition is the fact that the authorities cannot even trust their medical superintendents, men of high repute and

of untarnished honour, to perform their duties honestly. These gentlemen cannot be trusted to leave the institution for an hour or two when they feel they can safely do so. Their going out and coming in is carefully noted by a gate porter; and however much time may be given to the work of the institution at a period of stress, no corresponding relaxation can be taken in lighter times without an irritating exposure to official comment. By such a rule the irksomeness of asylum residence to the higher officials is enormously increased and their standing lowered in the eyes of their subordinates. That such conditions of existence are endured is a perennial source of wonderment to our American, Continental, and Scottish confrères.

This system of substituting fixed rules in place of the discretion and judgment of an experienced superintendent is necessary in order to make the authority of the committee clearly pre-eminent.

This system of government tends to reduce these asylums from the rank of hospitals to mere places of detention, and if persisted in and carried out to its logical conclusion would make them mere manufactories of chronic insanity. Such a result of an inordinate desire to exercise authority would justify Lord Salisbury's description of the London County Council as a young person possessing an enormous appetite and a bad digestion.

In most English county asylums and in the corresponding Scottish institutions the executive functions are carefully left in the hands of the superintendent, and everything is done to increase the respect and authority he wields, on which so much of the usefulness of the institution as a place for treatment depends. It is recognised that this object, the cure of the patients, is much more important than the aggrandizement of a committee. It is recognised clearly that everything occurring in an asylum may directly or indirectly affect the inmates and consequently should be within the purview of the superintendent. This does not necessitate that the superintendent should continually supervise the reception of stores, etc., but it gives him the right to inquire if anything prejudicial to the inmates comes under his observation or is brought to his notice and enables him to co-ordinate all the various activities of the asylum for the good of the patients. Observation,

alertness, and initiative are thus cultivated. In the London County Council asylums, on the contrary, although the superintendent is nominally the head of the institution, in practice his power, and especially his influence, are greatly limited, and the tendency of the present system of government is to leave little or nothing to his discretion or initiative.

This usurpation of executive authority inevitably tends to become more flagrant ; but since the committees meet only fortnightly, it becomes necessary to delegate their executive powers in the intervals to some other authority. The executive power thus gravitates into the hands of a permanent official, the Clerk to the Visitors, who, in course of time, will probably govern both the asylums and the committees. This official, whose office is barely mentioned in the Lunacy Act, and who possesses the most limited functions in the county asylums, is thus coming to play a most extraordinary part under the L.C.C. system of government, and the usurped executive authority would appear to be undergoing a second usurpation.

The limitation of the executive is illustrated in the most striking manner by the way in which the influence of the medical superintendent over the attendants is weakened or destroyed. The qualities of the attendants are among the most important therapeutical agencies of the asylum, yet inquiry would probably show that the medical superintendents have little voice in their selection, reward or punishment. It would probably be found that the relation of these officials to their superintendent is very much that which might be expected in a ship of war in which the maintenance of discipline was not primarily vested in the captain but in a dockyard board.

A committee is, of course, satisfied if the letter of its rules is carried out, and fails to recognise that the spirit of sympathy, kindness, and consideration for the inmates is a far more important matter, and that the individuals who possess or exercise these qualities are more likely to be recognised by a specialist than by a sub-committee of lay persons.

An attendant, who has only to obey the letter of the rules of the asylum, may be so passively unkind, unsympathetic, and irritating to his helpless charges as to be absolutely injurious, and yet may be successively promoted to posts in which he is more and more pernicious. This, however, is the class of

attendant who is most likely to succeed in an institution in which the spirit of duty is ignored and only the letter of the rules enforced.

In the ordinary county asylums the storekeeper, the steward, the clerk, the engineer, and the matron are directly subordinate to the medical superintendent, but in the London County Council asylums they are practically independent officials, the result being that in an ordinary asylum any small current emergency or difficulty is at once settled by the superintendent, whilst in the London County Council asylums it has to be postponed to the meeting of the committee. In the latter case small frictions between the officials which might have been settled speedily and forgotten, by postponement grow into serious matters of irritation and disagreement, keeping the asylum officials in a state of continuous annoyance and "worry." If the matter is urgent, it is probable that the parties concerned would appeal before the meeting of the committee to the *deus ex machina* of the central authority, knowing that very much of the decision of the dispute depends upon the view he takes and the manner in which he presents it to the committee. Naturally this officer would be inclined to favour the officials who most fully recognise his encroaching authority and to differ from those who would venture to oppose it. The principle of the central authority would be *divide et impera*, and squabbles and differences among the asylum officials would be welcome as making the central authority more necessary. The result would be that instead of amity, goodwill, and kindness being encouraged in the asylums and reflected by the officials on the inmates, malice, envy, and all uncharitableness would tend to predominate.

Under such conditions an institution, however vast, with its millions of bricks and miles of corridors, would approximate to an inferno, and the good intentions of the governing body would not even be as useful as they are reported to be in its prototype.

The London County Council, as this Journal has often recognised, has acted in regard to the insane with great liberality and with the best of intentions. We have every reason to hope that if there has been failure to secure good results, it will do its best to remedy the defects when once they are demonstrated. In this article there is no wish to do more

than to point out the fact that the London County Council has inherited, and perhaps exaggerated, an erroneous principle of government, which is tending to produce results that are infinitely more disastrous than the Horton scandal or even the Colney Hatch holocaust.

The question that the London County Council has to consider is whether it will continue to gather the executive power in its own hands or trust it to its medical superintendents; whether it wishes its asylums to be governed on the highest principles of science and human kindness, administered and co-ordinated by highly skilled specialists, or to be controlled by a non-resident official, who knows nothing of an asylum beyond the dry bones of its rules; whether it wishes its institutions to be like musical instruments played by the turning of a handle, becoming with increasing age more and more obnoxious, or to resemble magnificent organs, operated by highly skilled musicians with the most harmonious results.

A change must be made sooner or later, since the logic of events is proving to demonstration that the present system of government of the London County Asylums, as contrasted with all others, may be briefly summed up as the apotheosis of *how not to do it*.

(¹) See newspaper report, "Notes and News," p. 814.

Part II.—Reviews.

Die Perioden des Menschlichen Organismus in ihrer psychologischen und biologischen Bedeutung [*The Periodicity of the Human Organism and its psychological and biological significance*]. By Dr. HERMANN SWOBODA. Leipzig and Vienna: Deuticke, 1904. Pp. 135, 8vo.

During recent years a considerable amount of attention has been paid to the periodic and cyclic manifestations of human physiologic processes. The impetus was probably furnished by the discovery that menstruation is in reality a wave that exerts an influence over the processes of the body during the whole month. Perry-Coste's daily observations of pulse rapidity through many years served to show that in men there are weekly, yearly, and perhaps monthly curves in the

heart's pulsations, and somewhat similar rhythms were found by the same observer and by others in extended records of seminal emissions during sleep. Fliess, again, brought forward evidence to show a certain periodicity manifesting itself in congestion of the nasal mucous membrane, and his conclusions, though disputed at the time, have more recently received confirmation.

Dr. Swoboda, of Vienna,—whose investigations have some resemblance to Fliess's, though they are not altogether inspired by that worker—here seeks to discover the phenomena of periodicity in new fields. Previous inquirers had been content to seek physiological rhythms. Dr. Swoboda finds reason to believe that regular periodic recurrence is a mental phenomenon also.

The author, who frequently attends concerts, noticed some eight years ago that while it was very difficult to recall an air immediately after the concert, such sought-for airs seemed to show a tendency to re-appear spontaneously on the second day after the concert. When he became interested in the question of periodicity, he investigated his own experiences more carefully and came to the conclusion that it was after an interval of forty-six hours that the mental phenomenon tended to recur. Having thus been put on the track he proceeded to follow it up, interrogating his own experiences and those of his friends. He thus obtained a considerable amount of evidence pointing in the same direction, and not confined to musical reminiscences, but relating also to memories of pictures, voices, pains, etc. He further found evidence pointing to a periodic interval of twenty-three hours, and suspecting another of twenty-three days (twenty-four by twenty-three hours) he reached the conclusion that spontaneous memories tend to recur after an interval of hours represented by some multiple of twenty-three. At this point he became acquainted with the investigations of Fliess, who, in the pathological field, had found a periodicity of twenty-three days. Before long Dr. Swoboda verified such an interval in his musical reminiscences.

Beard had pointed out that any evil results of sexual intercourse are apt to be manifested not immediately but some days after the act. This Dr. Swoboda regards as an anticipation of his own more precise discoveries. Thus he found that in one case attacks of asthma occurred forty-six hours after incomplete coitus, although the subject had no knowledge of the interval.

Dr. Swoboda brings forward the evidence he has obtained and discusses it under various headings. Two chapters deal somewhat elaborately with dreaming, regarded as a field for the occurrence of periodic memories; the author has here found a period of both twenty-three and forty-six days. He also deals at some length with hysteria and neurasthenia, both of which conditions he regards as closely associated with the periodic sexual life. The author foresees a great future for the doctrine of biological periodicity; he believes it will constitute a new science, having the same relationship to astrology as chemistry has to alchemy.

The book contains many interesting facts, and various suggestions likely to arouse thought, as well as, very possibly, fruitful investigation. From a strictly critical point of view, however, it must be pointed out

that much must yet be done before the author's ideas can be accepted without hesitation. The field is necessarily an elusive one to work ; it is difficult to apply strictly scientific methods, and the results of coincidence and suggestion are peculiarly apt to intrude themselves. Dr. Swoboda is, however, a pioneer in this new and interesting region, and it is to be hoped that his conclusions will soon be tested by independent workers.

HAVELOCK ELLIS.

Reports of the Cambridge Anthropological Expedition to Torres Straits.
Volume V. Sociology, Magic, and Religion of the Western Islanders.
Cambridge: University Press, 1904. Pp. 378, 4to. Price 25s.

This volume of the Cambridge Expedition's *Reports* consists of eighteen chapters, dealing with such varied and interesting topics as kinship, totemism, birth and childhood customs, initiation, women's puberty customs, courtship and marriage, funeral ceremonies, morals, personal names, land tenure, warfare, etc. These chapters have been contributed in part by Drs. W. H. R. Rivers and C. G. Seligmann, and the late Mr. A. Wilkin, but mainly by Dr. Haddon, the leader of the expedition and the editor of the *Reports*. A subsequent volume will deal in a similar way with the sociology and religion of the eastern islands of Torres Straits.

Like those portions of the *Reports* which have previously been issued, this volume throughout bears evidence of the thorough and scientific spirit in which the expedition worked, and is full of valuable and interesting material which is seldom without psychological bearing, while, at the same time, it is full of instruction in the light it throws on the evolution of society and the path which civilisation has followed, as well as in the evidence it affords of the real social and moral value, the essential reasonableness under their conditions, of institutions and conceptions which have now been left far behind. Thus, in dealing with totemism, Drs. Haddon and Rivers clearly bring out the value of the bond between individuals of the same totem in promoting social sympathy and mental helpfulness. It is probable also that, fantastic as the mystic relationship between a man and his animal totem may seem to us, the idealisation of animal qualities, and the imitation of these involved, was a real stimulus to activity and success under savage conditions of life.

Courtship, marriage, and kinship are studied in an interesting series of papers by several authors. Courtship, it may be noted, was carried on by the women ; this system worked well, and gave a certain dignity to the woman's position, and it seems unfortunate that the missionaries have done their best to destroy it. Chastity before marriage was unknown, but so also was unbridled license, and the women made faithful wives. It was not permitted to take women prisoners or to violate them on head-hunting forays, for what we call "savagery" is by no means a constant or even frequent characteristic of savage life. Nearly everything is regulated.

A detailed account is given of the initiation of the boys into the duties and responsibilities of manhood. This is really a system of education. It only lasts a few months, but it is very thorough. The youths were subjected to good discipline, instructed in morals, and given time for meditation. "It is not easy," Dr. Haddon remarks, "to conceive of a more effectual means for a rapid training."

Of special psychological interest is the account of the training of a magician given by Haddon and Seligmann (pp. 321—323). It appears that anyone was eligible for such training, but by no means all could go through it. It lasted three years, and a magician only undertook the training of one aspirant to the profession at a time. First, with open eyes, the novice had to swallow a mixture of his teacher's feces and water; he had later to eat various more or less poisonous plants, and finally decomposing human flesh. Magicians frequently mixed the juices of corpses with their food. It is easy to see how such a training was adapted to bring about that condition of temporary delirium or even real insanity which is so favourable for the prophet's exercise of supernatural powers. At some points it recalls the feats recorded of the Hebrew prophets. It is not surprising to be told that one effect was to make the magicians "wild," so that they did not care for anyone, and all affection temporarily ceased for relatives, wife, and children, and on being angered by any of them they would not hesitate to commit murder."

It will be seen that this volume is full of fascination in the light it throws on the real mechanism of the savage mind. It is illustrated by eighty-four figures in the text and twenty-two plates.

HAVELOCK ELLIS.

Part III.—Epitome of Current Literature.

1. Anthropology.

The Capacity of the Italian Skull [La Capacità del Cranio nelle Popolazioni Italiane]. (Atti della Soc. Rom. di Antrop., 1904, fasc. i-iii.) Giuffrida-Ruggeri.

This is a critical summary by a leading Italian anthropologist of the main facts regarding the capacity of the Italian skull, in ancient and modern times, with reference to the separate provinces and to the country as a whole. There is not much difference in capacity between the ancient and the modern skulls, and sometimes that of the ancient skulls is superior; thus the Neapolitan skull is decidedly inferior to the Pompeian; the modern Roman has almost exactly the same skull capacity as the ancient Roman. The largest ancient Italian skull (Alfedena, 1482, c.c.), and the largest modern (Avezzano, 1488, c.c.) both come, it may be noted, from the same region, the Abruzzo

Aquilano. The author finds that the largest skulls are those of the Mediterranean race, and dolicho-mesocephalic, not—as he had expected, and as some authorities state—the brachycephalic. While this result may, doubtless, be accepted for Italy, we need not, therefore, on this account refuse to accept the opposed result obtained by many recent investigators in other countries (the Tyrol, Holland, etc.). Giuffrida-Ruggeri has carefully worked out the relation of the male to the female skull, and finds that for the whole of the country it is 100 to 89.6; as compared with other countries this is a medium result, and the author considers that 90 to 100 may be considered as the average relation of the capacity of the feminine skull to that of the masculine skull. It is a clearly written, interesting, and useful paper.

HAVELOCK ELLIS.

2. Neurology.

The True Motor Centres [*Die Wahren Centren der Bewegung*]. (Neur. Cbl., Dec. 2nd, 1904.) Adamkiewicz.

Dr. Adamkiewicz observes that ever since Fritsch and Hitzig in 1870 showed that, on electrical irritation of the cortex of the cerebrum, groups of muscles functionally related could be excited, it was thought proved that the cortex was the starting-point of the movements of the body and had motor functions. He claims to have shown in 1889 ⁽¹⁾ that by the destruction of the cortex cerebri the animal only loses the psychical functions of thought, of feeling, and of will, but not the capacity for movements, which is quite unaffected. An animal without the cerebrum retains its natural attitude and performs all the movements of the body if artificially excited. On the contrary, it has not the power to initiate any movements. It follows from this that the cortex does not belong to the motor apparatus, but it is the organ in which all psychical action arises, and from which issue excitations for the movements of the body.

The common opinion is that the will arising from the cortex sends its impulses through the corona radiata, the inner capsule, and the crura cerebri down to the direct and crossed pyramidal tract, and thence through the anterior roots of the spinal nerve, whereby contractions of particular muscular groups are excited. This view confused the psychical and motor parts of the apparatus of the will in an unphysiological manner. There was no definite limit, where the organ of the will ended and the motor apparatus began. But we may infer from the size and structure of the mass of grey matter that such a division exists, and that this mass must contain, arranged in a regular manner, not only all the centres of the movements of the body, which, since Fritsch's and Hitzig's time, have been erroneously assigned to the cortex, but also arrangements for the conveyance of those excitations which come from the anterior parts of the cortex, those of representation and will. That the basal ganglia of the hemispheres can be either the motor centres of the movements of the body

or the principal organs of this great function is contradicted by their anatomical connections, from which it follows that they are rather presiding organs (*Schaltorgane*) of certain parts of the brain than the principal bonds of connection of the brain with the whole motor apparatus.

We must therefore seek in another place for the central organ of the bodily movements. The origin of muscular movements, which as regards physiological function stands next to mentalization, would bespeak the largest portion of the central nervous system after the cerebrum. These considerations induced Dr. Adamkiewicz to seek in the cerebellum the central organ for bodily movement. Laborious experiments, begun in 1900 and now concluded, have confirmed these suppositions and led to the following conclusions.

The cerebellum is the main organ of movement, as the cerebrum is the main organ of the mental function. The destruction of the cortex cerebri puts an end to the mental functions without altering the motor mechanism injury to the cerebellum suspends the whole function of movement without harming the psychical function; and as there are especial functional areas in the cortex so there are especial areas in the substance of the cerebellum for particular combined movements. As on the surface of the hemispheres there is a localisation of the mental function, so there is on the surface of the cerebellum a localisation for motor functions, motor centres for the head, the trunk, and the extremities. These centres have a separate and fixed situation. They are on the same side as the muscular groups to which they transmit impulses. The muscles of the extremities are represented in the cerebellum with triple centres. Each anterior and posterior extremity has its own motor centre, and there is another for these two combined, besides a common centre for all the four limbs. The whole four are therefore represented in the cerebellum by seven motor centres. These views the Professor proposes to demonstrate in a coming work.

WILLIAM W. IRELAND.

(¹) "Die Pathologie des Gehirns," *Sitzungsber. d. k. Akad. der Wissensch. zu Wien. Math.-naturw.* Cl. lxxxviii. S. 113 ff.—(²) *Die Funktionsstörungen des Grosshirns.* Berlin, 1898, Hans Th. Hoffmann.

On Localisation of the Functions of the Cerebellum [*Saggio di localizzazioni Cerebellari*]. (*Riv. de Pathol. Nerv. e. Ment.*, May, 1904.) Pagano, G.

Dr. Joseph Pagano has also been investigating the functions of this structure which has so much perplexed physiologists. He observes that Weir Mitchell was the first to show that the cerebellar cortex responded to artificial stimuli. Nothnagel came to the conclusion that excitations of the cerebellum provoke muscular contractions on the same side of the body, and Ferrier demonstrated the existence of pains which influenced the movements of the eyes as well as of the head, limbs, and pupils. Mendelssohn, using weak electrical currents, was unable to confirm Ferrier's localisation, but he found that electrical excitation of the cerebellum provoked movements of the eyes and of some other parts of the same side of the body. Arguing from the well-observed influence of lesions of one side of the cerebellum on the same side of the body,

Dr. Pagano regarded this as a proof of cerebellar localisation, and proceeded to make some experiments on dogs with a view to gain further and more precise knowledge. His method of research was to inject from one to two tenths of a cubic centimetre of a one *per cent.* solution of curare into certain points of the cerebellum. For this he uses a small trephine and a fine injecting needle. His experiments are illustrated by eleven plates.

Dr. Pagano discovered an area of the cerebellum from which tonic flexures of the hind legs could be induced. This was a point about the middle of the vermis. The character of the movements differed from that following excitation of the motor areas of the cortex cerebri. The injection of the same solution of curare in the cerebral motor centre and the action of curare on the surface of the motor zone provoked clonic contractions of the limb, abrupt and spasmodic. On the other hand, the injection of curare into the area of the cerebellum produced a tonic contraction, an attitude rather than a movement, which in some cases might endure for several minutes and return at intervals during several hours. This contraction has all the characters of a contracture, save that it may be suspended by a voluntary effort.

Dr. Pagano considers that his researches warrant him to affirm :

1. That the cerebellum is not a homogeneous organ ; but, like the other nerve centres, the different modes of its activity are exercised by precise and distinct areas.

2. The centres which he has discovered are without doubt not the only ones. It will be the task of successive observers to fix the seat of other centres correlated to other muscular groups.

3. The motor elements do not appear to be situated on the surface of the organ, but lie deeper.

4. There are centres the irritation of which always causes psychical exaltation. These can be sufficiently localised.

Dr. Pagano explains this psychical exaltation as a state of extreme restlessness, irritability, and an unusual readiness to react to slight impressions. This exaltation in most cases passes away in from ten minutes to half an hour, when it is succeeded by generalised epileptiform convulsions, after which the animal falls into an apathetic state. Dr. Pagano cites a passage from Luciani in which that eminent physiologist states his hesitation in excluding the cerebellum from all participation in the phenomena of psychical life. Pagano notes that intellectual decay frequently follows disease of the cerebellum in human beings. The author does not escape from the difficulty, common to all who have investigated the function of this organ, of giving a clear definition of their results in accordance with their observations. He, however, boldly advances that, after eliminating some faulty observations, all the data furnished by the physiologists and the clinical observers who have studied the functions of the cerebellum, far from contradicting, support and complete one another, and agree with his own researches. The facts which support the view that the cerebellum regulates the equilibrium of the body do not clash with those which indicate that this organ dispenses a force destined to raise the tone of the neuro-muscular apparatus.

WILLIAM W. IRELAND.

The Action of Calcium on the Cerebral Cortex [*Azione del Calcio-ione sulla corteccia cerebrale*]. (*Riv. speriment di Freniat.*, vol. xxx, fasc. 1.) Roncoroni, L.

In this paper Roncoroni gives the result of his researches on the action of calcium on cortical activity. Sabbatani previously had demonstrated the inhibitory power exercised by calcium over cellular activity and the antagonistic action displayed by substances capable of neutralising this element when used to control its effect. In addition to the salts used experimentally by Sabbatani as antagonistic to this action of calcium, the author discovered many others, of which he found sodium sulphate of most value. His conclusions are that substances which render calcium inert, either by precipitation or other means, when their action is not interfered with by any other factor, cause an increase of the cortical excitability, while the salts of calcium depress it.

In the salts of calcium used for these experiments care had to be taken to eliminate those whose acid radicals might of themselves have a depressing cortical action which would interfere with the result by complicating the action of the calcium base.

He used the following salts of calcium in his experiments: the bromide, iodide, nitrate, acetate, and lactate. The chloride was but little employed, as Sabbatani had already used this salt extensively in his experiments. Of these, four only gave the proper physiological effect of the calcium, namely, the chloride, acetate, lactate, and nitrate, the acid radicals being innocuous. In the case of the other two the depressing action of the base was complicated by the fact of bromine and iodine being themselves brain-depressors.

Roncoroni's experiments were conducted on dogs. He laid bare the motor region of the cortex on one side, and tested first the amount of current necessary to cause a slight movement of the fore-paw. He then applied a solution of the calcium salt to the cortical surface on a pledget of cotton-wool, and after ten minutes tested the amount of current necessary to produce a similar contraction. Following this a solution of the salt antagonistic to calcium was applied—sodium phosphate—and the electrical excitability was tested anew.

From these experiments he found that sodium phosphate, which precipitates calcium, has an antagonistic action to that of the acetate, lactate, and nitrate of calcium. By applying a solution of sodii phosphate he raised the cortical excitability which had been lowered by the calcium salts, and this was again depressed if the salt of calcium were applied afresh. This experiment was not so clear of demonstration in the case of the iodide and bromide of calcium for reasons previously given. In the experiment with the iodide another complication presented itself, *viz.*, the congestion of the cerebral area experimented on, which interfered with the action of the antagonistic salts, and probably prevented the absorption of the solutions subsequently applied.

A. J. EADES.

3. Physiological Psychology.

The Congress of Experimental Psychology at Giessen [Erster Kongress für experimentelle Psychologie in Deutschland]. (Zeit. f. Psych. u. Phys. d. Sinnesorgane, 1904, Heft 5.) Dürr, E.

At this Congress, which was presided over by Professor J. E. Müller, of Göttingen, fifty-one papers and demonstrations were brought forward, covering a very wide field of normal and abnormal psychology. Among the more interesting and important were those by Dr. Henri on the methods of individual psychology, Müller on colour-blindness and the theory of complementary colours, Dr. Guttmann on colour-weakness, which he finds associated with stronger than the usual simultaneous contrasts and by speedy exhaustion. In dealing with geometric optic illusions Ebbinghaus came to the conclusion that various causes must be invoked for their explanation. A paper by Tschermak, on the perception of depth, and the discussion which followed, showed a general tendency to harmonise nativistic and empirical theories. Exner dealt with certain extirpations of the cortex in dogs in relation to problems of sensation. Aerutz discussed the analysis of various kinds of tactile sensation. Müller described the extraordinary memory of Dr. Rückle of Cassel, who is, for instance, able to learn a series of 204 figures in eighteen or nineteen minutes, or only a quarter of the time required by Diamanti, and reproduce them in the most various orders; his memory is said to be of optic character, but with acoustic-motor elements. Weygandt read a paper on sleep, showing by experiments on himself that short periods of sleep do not suffice to remove the exhaustion of mental work. Claparède presented a new theory of sleep which he regards, not as the result of a kind of intoxication, but as an instinct, having for its object the prevention of intoxication. Martius discussed the influences of psychic processes on pulse and respiration, and showed that the contradictory results so far reached are due to defective methods. Groos dealt with the beginnings of art, and argued that it could not be derived exclusively from sexual sources. All these and many other papers are summarised by Dürr.

An important outcome of the Congress was the establishment of a society for experimental psychology, with Prof. Müller as President and Prof. F. Schumann of Berlin as Secretary. HAVELOCK ELLIS.

The Relation between Vaso-motor Waves and Reaction Times (Psychol. Rev., May, 1904). Wright, W. R.

Does the reaction time of a subject vary in length in accordance with the rise and fall of his vaso-motor or Traube-Hering wave? In seeking to answer this question, Wright placed the subject in a room separate from the recording apparatus, so that all distractions were reduced to a minimum. A Hallion and Comte plethysmograph was attached to the subject's left hand, and with his right he operated a telegraphic key. On the table in front of him (but screened from his view) was a telegraphic sounder, furnishing the auditory stimulus to which he reacted. Air-tight rubber tubing and insulated wires connected the apparatus with

two kymographs in the experimenter's room. Five persons served as subjects.

Wright records his experiments and concludes that they show that the subject's reactions form a curve which in shape agrees with the curve of his vaso-motor wave. Patrizi, in a somewhat similar series of experiments on one subject, reached similar but less decisive results, and therefore concluded against any relation between blood supply and reaction time. Wright, by confirming Patrizi's results on a larger scale feels himself justified in negating Patrizi's conclusions from those results.

HAVELOCK ELLIS.

Some Cases of Coloured Hearing [Audition colorée]. (Arch. de Psychol., Feb., 1904.) Lemaitre, Aug.

Three interesting cases of this condition are here recorded. The first shows how the condition may be acquired. A boy, æt. 7 (he is now 14), was playing in the country, near Geneva, with some young peasants who were amusing themselves with trying to gaze at the sun. Immediately afterwards he lay down on the grass and went to sleep. A little later a young shepherd shook him and said: "Get up!" To the child's stupefaction he saw against the shepherd's chest a mass of brilliant and changing colour, appearing and disappearing with each word that he uttered. Since then this phenomenon has been more or less persistent, and the words uttered by others (not those spoken by himself) call forth an elongated mass of oval colour, about the size of "the hollow of the hand," the colour varying infinitely not only with the person who speaks but with the same person at different times. The deeper and stronger the voice is, the lighter the colour (though the boy himself remarks that one would expect it to be the contrary way). The phenomenon is so marked that the boy, who is very intelligent, is dazzled and unable, for instance, to write to dictation, or to copy when others are talking. There is also some degree of photophobia. He is nervous and restless, unable to control perfectly the movements of his limbs, and with fibrillar twitchings of the calves. His grandfather was somnambulistic. In explanation of the origin of the phenomenon Lemaitre puts forward the supposition that the child's nervous system had been rendered erethic by the insolation, and that the violent command "Get up!" overpassed the auditory region of the brain and reached the optic territory—an explanation which seems more ingenious than convincing.

In the preceding case the photisms were very variable. In a second case they were remarkably constant. It is that of a young man whose photisms are almost universal. He does not himself take much interest in them, yet when questioned concerning the colours of a long series of sounds and words, at intervals of a year, the examination being continued during three years, the changes in the colours were for the most part very slight.

In a third case the stability of the photisms was established not only for the individual but hereditarily. A boy, æt. 13, found that all the vowel sounds were for him accompanied by colours—*a* red, *e* white, *i* black, *o* yellow, *u* blue. He had never heard of the phenomenon from any other person, but on telling his mother he learnt that she also had

always experienced it, and saw exactly the same colour as her son for each vowel. As regards the diphthongs, however, mother and son were not agreed, and the mother's synæsthesias were more extensive than the son's.

HAVELOCK ELLIS.

Variability of Reaction-Time. (*Psychol. Bull.*, April, 1904.) R. Yerkes.

The *Psychological Bulletin* is a "literary section" of the *Psychological Review*, of some fifty pages, now published every month, and made up of short articles, reviews, and notes.

This paper on reaction-time deals with scientific method rather than with results. The author believes that investigators do not give sufficient attention to the variability of their results, and wishes to call attention to (1) the importance of variability in reaction-time statistics; (2) the need of choosing statistical methods in accordance with the nature of the material in hand and the demands of the problems; (3) the desirability of the more general use of curves of distribution; (4) the pre-eminent importance of relative variability, or the co-efficient of variability, for comparative reaction-time studies; and (5) the use of equality of variability as a basis of comparison in case of reactions to different modes of stimulation. In every study of reaction-time, he points out, it is usually desirable, and often necessary, to determine (1) *the curve of distribution*; (2) *the mode* (i.e. the most frequent group); (3) *the average* reaction-time, with its probable error; (4) *the range* of the series; (5) *the standard deviation* and its probable error; and (6) *the co-efficient of variation*. Several diagrams are given in illustration, and the paper will be found very valuable by those who wish to work out reaction-times in accordance with the methods now widely advocated by scientific investigators.

HAVELOCK ELLIS.

4. Clinical Neurology and Psychiatry.

On Unilateral Hallucinations of Hearing [*Sulle allucinazioni unilaterali dell' udito*]. (*Riv. di Patologia Nerv. e Ment.*, vol. ix, p. 228, May, 1904.) Lugaro, E.

Lugaro's patient, a married railway official, æt. 39 years, had a maternal aunt who suffered from about 40 years of age from delusions of persecution, and a sister who, from the age of about 39, suffered from auditory hallucinations and mental enfeeblement. He himself broke down after his father's death, in 1898, became intensely depressed, and shot himself with a revolver in the right ear. The external auditory canal and the drum were injured by the ball, which lodged in the temporal bone, and was probably only partially extracted, having been broken up in its progress. Notions of persecution and sitophobia followed the suicidal attempt, but these were soon relinquished, and patient professed to have forgotten them, though he remembered the other incidents of his early illness. In about two months he resumed his business, feeling perfectly recovered. Early in November, 1901, he

relapsed after domestic trouble. He was silent, sluggish, sitophobic, sleepless; in a few days became lucid, saying that during the silent period he had constantly heard a voice calling into his right ear, "Kill yourself! kill yourself!" It seemed his dead father's voice. During the two previous years he had heard a noise in this ear like the sound of a grasshopper, but non-rhythmical, low, uniform and continuous. He was discharged quite recovered at the end of November. The "voices" soon returned; they came from time to time when he was alone and thinking, particularly when he lay awake at night, but also during office hours. The "noise," on the other hand, was continuous, but most noticeable when there was stillness around. The voice which seemed his father's said, "What hast thou done? Scoundrel!" referring to his suicidal attempt, for which he experienced remorse. Later, the patient began to hear his thoughts repeated in his right ear. He then endeavoured to divert his mind from this phenomenon and to turn the current of his ideas, but in a moment the hallucination returned again, clear and impressive. Early in November, 1903, the hallucination became more frequent, diurnal, always on the right side, the repetition of thought more insistent than ever. After a trivial domestic annoyance, he became much disturbed, and finally stuporous. Readmitted to asylum. He soon again recovered, and was able to give a lucid and intelligent account of his symptoms. Objective examination showed a cicatrised right membrana tympani. The right ear was deaf. Tuning-fork to vertex heard only in left ear. Electrical examination showed that a moderate current produced hissing noises in the right ear, while the strongest that could be borne was absolutely without this effect in the left.

Lugaro believes that the only other examples in literature of an hallucinatory repetition of thought in the unilateral form are cases which have been recorded by von Bechterew and Régis. In discussing unilateral hallucinations he follows Tanzi, and expands the latter's theory to the effect that the fibres which normally subserve the function of attention may in diseased conditions serve to carry sensory impulses from the higher to the lower centres—that is, in a retrograde direction. While each ear has its centre in the opposite hemisphere, yet each ear is connected with both hemispheres through the fact that the auditory tracts are only partially crossed; in the same way the attention-fibres from each ear connect with both hemispheres, though mainly with the opposite: therefore, the *acusma* acts by constantly fixing the attention (whether with the patient's full consciousness or not) on the affected side, and thereby facilitating the transmission downwards of impressions originating in the higher centres. Thus the threshold of hallucination is rendered lower on the diseased side, and a central disturbance incapable of giving rise to hallucination on the sound side, and which would, perhaps, never have given rise thereto if the patient had not had a diseased ear, causes hallucinations solely on the side whence originated the *acusma*.

On the other hand, acquired deafness and acquired blindness undoubtedly favour hallucinations respectively of hearing and of vision. In some cases, as in the one above described, the phenomena of *acusma* and deafness are combined. In case of unilateral auditory

hallucination with deafness it may be said that the sensory centre, condemned to inactivity by deprivation of its natural centripetal stimulant, acquires a special sensibility, and reacts too readily to retrograde stimulation. Neither is this explanation inconsistent with that which has been given above, for the acusma that may be combined with deafness or partial deafness is not sufficient to exhaust the energies of the centre, which remains inert, in spite of the more or less continuous irritation of a comparatively simple nature. CONOLLY NORMAN.

The Pathogenesis of Hallucinations [Nota sulla patogenesi delle allucinazioni]. (Rev. di Patol. Nerv e Ment., vol. ix, fasc. vii.) Roncoroni L.

In this paper, the author gives his views as to the pathogenesis of hallucinations and endeavours to prove the fallacy of Tanzi's teaching. He quotes this author at length and gives specious reasons for doubting his theories.

He says that Tanzi has developed in a very full and original manner the theory of an hallucination being the result of a retrogression of a represented image on to the sensory centres, but he does not seem to have removed the doubt that his theory is neither necessary nor sufficient to explain the phenomenon. Tanzi, while admitting the identity of the situation of sensory phenomena and hallucinations, holds that the origin of all genuine hallucinations is transcortical. He writes: "The hallucination arises as an idea or a symbol, or a more or less conscious part of an idea, in the association region . . . this returns to the sensory area whence it emerged as a sensation. It thus becomes anew what it was—a sensation, but a pathological one, owing to its unusual origin."

One of the chief arguments advanced by Tanzi against Tamburini's theory is that it does not explain how incongruous pathological stimuli—as, for instance, a chemical irritant—acting on the usual centres, produce complete images, since the visual centre of each hemisphere can only give rise to a half-image. They should rather, according to Tanzi, excite a confused mass of hemianopic images. The author holds that it has not been proved that chemical irritants, acting on the nerve centres, produce hallucination. The toxic agent only acts as a predisposing cause: the hallucination arises, except in cases of local stimulation, through a psychological process. This may seem to lean to Tanzi's theory, but it has not been proved that the psychological stimulus determining the origin of the hallucination belongs solely to the representation centre corresponding to the sensory centre where the hallucination is present.

Gowers believes in the existence of a higher visual centre in which is represented all the retina of the opposite side as well as that of the same side, but the former more than the latter, and that this centre was connected with the corresponding centre of the other side, as well as the cortical visual spheres of either side. It is not necessary, Roncoroni holds, to call into aid such a centre, since it is admitted that the visual centres of both sides are directly connected by com-

missural fibres, and every stimulus that acts on one hemisphere is transmitted to the other, completing the image, the half-image of one eye arousing the half-image of the same eye on the opposite side so quickly that there is no consciousness of it.

For hallucinations to occur, the cortical centres of both sides must be in a particular state of irritability, and this may be occasioned by toxins, among other causes. If only one side is stimulated, the half-image corresponding to the normal side will not be projected, and hemianopic hallucinations will result. Pick had a case of this kind, but they are rare. It can be understood how bilateral homonymous hemianopic hallucinations arise if one of the visual centres is the seat of a severe lesion, as in Peterson's case, where the hallucinations were present only in the visual fields corresponding to the uninjured centre, and did not appear in the blind half of the field of vision.

Roncoroni is not prepared to say whether the centres where representation and sensation are formed are identical or not: he says that even more centres may exist for syntheses of different degrees, but holds that hallucinations are formed by a mechanism different to that put forward by Tanzi.

The author criticises Tanzi's arguments and facts brought forward to support the latter's theory, and holds that these can be explained easily in another way. Thus in the hallucination with the eyes shut, contrary to what generally happens in hallucinations, the pathological image is impeded in its manifestation by the real image when the eyes are opened.

In a case reported by Pieraccini the image disappeared on closing either eye, but this was probably due to auto-suggestions.

According to Tanzi the thought expressed aloud demonstrates the fact that there are separate centres for representation and hallucinatory sensations, for if the thought and its hallucinatory repetition had the same seat of origin one would have to admit a repetition of the stimuli. It is not, however, Roncoroni holds, necessary to suppose that the thought arises in every case in the representation centre corresponding to the sensory one where the hallucination apparently is seated. The idea might have its origin in other cortical centres, such as the visual or motor-verbal.

Bilateral antagonistic hallucinations, hallucinations of contrast, and associated antagonistic hallucinations may be explained by supposing that there are two antagonistic thoughts which determine in the sensory centres each an opposing hallucination. Here, also, it is not necessary to hold that the representations which arouse the hallucinations originate in the representation centre corresponding to the hallucinated sensory one.

Tanzi himself asks why, if the hallucinatory image is preceded by an analogous thought, many times it happens that the hallucination seems to have no relationship to the thought. His opinion is that this is due to the great rapidity of the "sensory repercussion" (*viz.* the recoil to the sensory centres) and also to the fact that the representation causing the hallucination is of a sub or unconscious nature. Unilateral hallucinations of hearing also seem to Tanzi to oppose his theory, and he has to call to his aid adventitious sounds in the affected ear to explain them.

According to Tanzi, sensations leave no trace on the sensory centres. These centres cannot give of themselves a complete image, but can only reflect it, acting in the case of sight like a mirror, in hearing like a resounding-board. In the representation centres, he says, mnemonic representations are fixed in the state of symbols. The hallucination is the result of the sensory centres, in pathological cases reflecting these mnemonic representations. Roncoroni asks, How can the sensory centres reflect a symbol? If the representation centres contain, as Tanzi holds, a picture of reality, they would be sensory in their function.

To sustain his theory Tanzi is constrained to deny to peripheral hallucinations the character of genuine hallucinations. Now, many authors hold that purely central hallucinations do not exist. Sully says that in the majority of hallucinations it is impossible to prove that there is no contributory external action.

Roncoroni holds that the mechanism at work in the formation of hallucinations is identical with that involved in epilepsy as propounded in an earlier paper. He puts forward the following conditions as necessary for the origin of an hallucination: (1) A hyper-excited condition of the hallucinated sensory centres. This state may be unilateral or bilateral, temporary or permanent. (2) Diminution of the inhibitory action of the association centres. He holds that as in epilepsy the subcortical centres assume more important and independent functions, and are less under control to the inhibitory action of the higher centres. These two factors are as a rule present together, but either may be wanting or in excess of the other. In cases where the hyper-excitability of the sensory centres is lacking he supposes, with Kraepelin, that the psychical centre is in such a state of over-excitability, and the representation power so vivid, that the sensory centre is stimulated in a manner similar to that obtaining in the case of a peripheral sensation.

The cause which determines the hallucination.—He believes that there is a stimulus of either a psychical (having its seat in the psychical centres, motor, sensory, or senso-motor) or a non-psychical nature.

Seat of the stimulus.—There is nothing to preclude the situation of the stimulus being in any part of the senso-psychical tracts, the hallucination being, as Tamburini held, in the sensory centres. The stimulus may arise from a peripheral organ; from the nerve connecting this with the subcortical centres; from the subcortical centres; from the cortical sensory centres (simple or complex); from the tracts uniting the sensory centres with one another or with motor or psychical centres; from peripheral parts of the body connected indirectly with the hyper-excited sensory centre; or from neoplasms or neuroglia in the sensory centre.

Roncoroni says that if we consider as such the situation of the hallucination, the conditions through which it arises, the causes which evoke it, and the seat of the stimulus which determines its manifestation, the clinical facts receive a natural explanation. Some of these have already been explained, as the hallucination with the eyes shut, and the thought expressed aloud. That the hallucination often has no relationship with the idea occupying the attention can be understood when the

stimulus provoking the hallucination has nothing in common with what the patient actually has in his thoughts.

As to unilateral hallucinations, Paoli's explanation is not an improbable one—that if the recall of an image can by retrogression acquire an hallucinatory character when the sensory centres are in an over-excited state, it can also be assumed that the phenomenon could be localised in one ear, if one only of the cortical auditory centres was in a similar excitable condition. This explanation will not suit for unilateral hallucinations of sight, because of the hemianopia resulting. For them always remains the hypothesis before mentioned of a higher visual centre, if this can be admitted to be alone in a state of hyper-excitability. On the other hand, it is admitted that the two cortical visual centres are united by commissural fibres, by the co-operation of which there is formed a complete image. It is possible, Roncoroni alleges, that the half-image of one eye has a greater intensity and proneness to reaction than the half-image of the other eye; so that if one hemisphere alone is stimulated the half-image of one eye only may be projected, and this, co-operating, by means of the association fibres, with the half-image of the same eye in the other hemisphere, would give a complete unilateral hallucination of sight.

Bilateral antagonistic hallucinations can be explained if it be supposed that the sensory centres are open to stimuli of different types—for instance, representations of opposite significance; but these need not come from the representation centre corresponding to the hallucinated sensory one.

The author holds that a very serious problem remains. If the conditions under which hallucinations are formed are permanent, why is it that they manifest themselves at intervals? Perhaps, he says, it is because the stimuli capable of evoking them are present only at intervals; perchance because the arrest or disturbance of the inhibitory power is not permanent, at least in its entirety; or because the morbidly excited state of the sensory centres can undergo phases of increase or diminution.

A. J. EADES.

Mental Symptoms associated with Pernicious Anæmia. (Amer. Journ. Med. Sci., June, 1904.) Pickett, W.

Five cases of pernicious anæmia exhibiting mental symptoms are here briefly described.

A composite picture of the mental disturbance in these cases, says the author, presents a shallow confusion with impairment of the ideas of time and place (disorientation), more marked on awakening from sleep. The patient fabricates, relating imaginary experiences of "yesterday" in a circumstantial way.

Illusions, particularly of identity, are common. Hallucinations appear at times, pertaining to any of the senses.

Based upon these illusions and hallucinations, persecutory delusions arise. These are usually transient, causing episodes of fear or agitation, but they may persist for considerable periods and be thus somewhat fixed; they may be even systematised, as in one of the cases described.

The pernicious anæmia psychosis is mainly an abeyance of mind; it

rarely presents that spontaneous excitement by which some types of confusion seem to merge into true mania ; so that the term "amentia," in Meynert's sense, seems appropriate for it. A. W. WILCOX.

On Insanity after Acute and Chronic Infectious Diseases [Über psychosen nach akuten und chronischen infektionskrankheiten]. (Allgem. Zeitschr. f. Psychiat., H. i, 1904, p. 185.) Siemerling.

Professor Siemerling, at the Annual Meeting of the Psychiatric Association at Kiel, read a paper on this subject. He observes that there is no infectious disease in the course of which mental derangement may not supervene. Typhoid fever appears to head the list as a cause of insanity. After an epidemic of this malady in Königsberg out of 176 patients there were eight cases of mental derangement—4.5 per cent. After this Siemerling ranks acute articular rheumatism and influenza. Insanity also sometimes follows attacks of pneumonia, pleurisy, malarial fever, small-pox, measles, scarlatina, and diphtheria, erysipelas, phthisis, whooping-cough, mumps, cholera, dysentery, lepra, hydrophobia, gonorrhœa, ergotism, and pellagra. The last two intoxications, which have been so ably studied by Tuczek, may be here left out of consideration. The delirium attending fevers generally passes away with convalescence. In a few cases, the mental affection continues under the form of neurasthenia or acute insanity with hallucinations (amentia), katatonia, paranoia, mania, or melancholia. There are no characteristic symptoms to distinguish insanity following infectious diseases from other forms. It is in the decline of the febrile action or in the period of convalescence that we most frequently meet with cases of insanity. The asthenic type is the commonest, with incoherency and dreamy confused mental states, shifting hallucinations, and illusions, wandering delusions, and emotional weakness. Sometimes stupor and excitement succeed one another. Siemerling has observed in children permanent weakness of mind down to idiocy following upon the exanthemata, erysipelas, diphtheria, and parotitis epidemica, influenza, and whooping-cough, sometimes taking a stuporose form, sometimes that of acute dementia. Simple mania and melancholia are rare with children. Siemerling remarks that we can no more speak of a tubercular insanity than of a typhous insanity ; but it sometimes happens that in the course of phthisis and in the deepest stages of inanition the mental derangement entirely disappears. It also occurs, though rarely, that after typhus, influenza, or erysipelas the symptoms of insanity improve or there is a complete recovery. This has given hopes of effecting a cure through infection, as with the cocci of erysipelas or some other communicated disease.

As regards prognosis, insanity following infection is generally of short duration, though in a few cases it does last from several months to years. Siemerling has found those following pneumonia the most persistent.

The prognosis is bad in severe delirium, in typhoid and acute articular rheumatism (typho-mania, cerebro-rheumatismus), with a high temperature (from 41° to 44° C.) when death may follow in a few hours. This happens in half the cases. Nothing special in the treatment is

recommended by Siemerling save that under some circumstances he recommends lumbar punctures when there are symptoms of meningitis.

WILLIAM W. IRELAND.

Criminality in Sardinian Lunatics [La delinquenza negli alienati sardi].
(*Arch. di Psichiat.*, vol. xxv, fasc. i—ii, 1904.) Sanna-Salaris.

The author analyses 62 cases—55 men and 7 women—of lunatics who had committed criminal offences and were sent for observation to his asylum.

He draws the following conclusions from his study :

1. Though it is true that the same form of delinquency is common to the different varieties of insanity, it is none the less a fact that the grave offences are more generally committed by two special categories of lunatics—epileptics and paranoiacs.

2. As the race exercises a conspicuous influence in determining the nature of the delinquency and the criminal proclivity, the crimes committed by the insane are found to resemble in character those of the sane population to which the insane criminals belong : criminal tendencies are most marked in the insane in districts where sane crime is most frequent.

3. A large number of the individuals examined presented somatic stigmata of degenerescence, the minimum being among the paranoiacs, the maximum among the epileptics and the imbeciles.

4. Among the patients, delirious ideas, either paranoiac or merely the exaggeration of superstition, were very frequent, and, alone or with other influences, were one of the chief motives of crime.

W. C. SULLIVAN.

The criminality of the insane [Della criminalità nei pazzi]. (*Il Manicomio*, anno xix, No. 3, 1903.) Angiolella.

The author discusses the relation between insanity and crime, basing his views on the study of a series of criminal lunatics in the Nocera asylum. The number of such cases admitted in ten years was 115, which, compared with the total male receptions in the same period, gave a proportion of 3.99 *per cent.* The number actually under treatment is 81, being 9.96 *per cent.* of the daily average of male patients. These proportions, the author points out, though high, when it is borne in mind how the presence of such cases must interfere with the order and discipline of a general asylum, are extremely low considering the current ideas of the criminal tendencies of the insane.

Of the 115 cases 68 were lunatics who had committed crimes, and 47 were criminals who had become insane in prison.

Of the former category 33, or nearly half, were epileptics in the wide sense of the Italian school ; 15 others were paranoiacs ; 13 moral idiots ; while recurrent mania and chronic mania accounted for two each, and hebephrenia, lypemania and hallucinatory delirium for one each. Thus criminal tendencies were chiefly associated with the insanities arising on a basis of degenerescence, and were hardly found at all in the pure psychoneuroses.

Moreover, except in cases of paranoia, there is very rarely any

apparent connection between the mental disease and the criminal act : of the twelve epileptics, for instance, who had actual convulsive attacks only six committed their offences in the dream state. And, though in cases of paranoia the victim of the lunatic's violence is generally the villain of his delusions, the interpretation of this fact is not, the author holds, that the insanity caused the crime, but rather that the aptitude for both lay in the individual's nature. The anomaly of character, in fact, which is the potentiality of paranoia has considerable affinity with the essential anomaly of the moral lunatic and the criminal. And a further proof of this is found in the fact that the typical insanity of the criminal in prison is of paranoiac form : in the 47 cases, for instance, of insane prisoners in the author's series, all but four were cases of paranoia. The author maintains, therefore, that in general there is little real difference between criminal lunatics and lunatic criminals : both are criminals with a psychopathic aptitude, and it is a question of environment and of the strength of the insane as compared with the criminal tendency whether crime or lunacy appears first.

Details of a number of the cases are given, as well as tables showing for the whole series the relation of the form of delinquency to the form of insanity, the distribution of the cases in the several provinces, the cranial characters of the individuals, etc.

As regards the character of the delinquency, the series showed the usual predominance of homicidal offences, 78 out of the 115 being of this nature, while there were only eight crimes of acquisitiveness and four of lust. Special note is made of the fact that criminal tendencies seem to be more prevalent with paranoia than with epilepsy, there being 46 paranoiacs as against 19 epileptics among the homicides. And this is confirmed on comparing the criminal with the non-criminal inmates of the asylum, the proportion of criminal paranoiacs to paranoiacs in general being considerably higher than that of criminal epileptics to all epileptics.

W. C. SULLIVAN.

5. Treatment of Insanity.

Of the Placing of the Insane under Restraint and of the Powers of the Police to Intervene [Du placement des aliénés et de l'intervention des commissaires de police]. (Prog. Med., April 16th, 1904, p. 253.) Bournville.

M. Bournville, together with a growing number of alienists, pleads for the recognition of the asylum as a hospital for mental disease and the more ready admission of patients into asylums, the legal formalities having been duly effected.

In France, the insane patient can be placed under care either by the voluntary act of the relations (*placement volontaire*) or through the agency of the police (*placement d'office*). M. Bournville urges that all admissions under care should be by *placement volontaire*, with the exception of those cases in which the police have had to arrest or take into custody the lunatic. He further draws attention to a serious flaw

in the *modus operandi* of the *placement d'office*. It would seem, *viz.*, that the police officer cannot take action upon the report that an insane person is likely to commit an act which will endanger himself or others, but must wait for the authority of the *fait accompli*. A case in point is recorded in which by a happy chance alone the disaster of the *fait accompli* was averted, and the *placement d'office* system saved from scandal.

HARRINGTON SAINSBURY.

On Veronal [Ueber veronal]. (Psych. Neur. Wochensch., May 7th, 1904.) Herm van Husen.

This recent hypnotic has now received considerable attention, and the general verdict is decidedly favourable. It was introduced by Fischer and v. Mering; it has a urea nucleus with two ethyl groupings, and it is named chemically diethyl malonyl urea. Its rational formula shows a resemblance to the sulphonal and trional groupings. It is rather insoluble in cold water but dissolves fairly in hot water, and may be given in hot tea or milk, or it may be administered as a powder or in cachet, or in the form of Merck's cocoa tablets. Dr. van Husen sums up the results which he obtained on sixty-nine patients in the Grafenberg asylum as follows: In simple sleeplessness it is an excellent hypnotic, and for the most part induces sleep within twenty minutes to one hour; this is general in the dose of $7\frac{1}{2}$ grains. In mild cases of excitement it is also very serviceable, but the requisite dose is on an average $15-22\frac{1}{2}$ grains ($1-1\frac{1}{2}$ gr.). The sleep induced is somewhat delayed. In severer cases of excitement and unrest, as in senile restlessness and in dementia præcox, it fails not infrequently. It comes nearest to trional in the quality and quantity of its effect; only rarely does it seem to surpass trional in activity. A certain amount of cumulative action may be noticed (as also in the use of trional) in that the effects will occasionally fail until a third or fourth dose has been given, also in that the effects will often persist awhile after discontinuance of the drug. Prolonged use of veronal is liable to produce habituation, the dose requiring to be raised. Severe after-effects or by-effects are not witnessed, but giddiness, confusion, inclination to stagger, may be noted, especially after doses of $15-22\frac{1}{2}$ grains, occasionally after $7\frac{1}{2}$ grains.

The use of veronal on a large scale is contraindicated at present by its costliness; its advantages over the much cheaper trional, whose efficacy seems to be about on a par with it, are therefore not very obvious.

HARRINGTON SAINSBURY.

A Case of Veronal Poisoning [Ein Fall von Veronal Vergiftung]. (Cbl. f. Nervenheilkunde u. Psychiat., June, 1904.) P. T. Hald.

Not a few cases of toxic symptoms have been recorded after the use of veronal, especially after the employment of the higher doses of $1\frac{1}{2}-2$ or even 3 grammes, but instances of the effects of a single massive dose are scarcely to be found. Dr. Hald's report of the results of 9 grammes (140 grains *circa*) taken in a single dose is the more valuable. The patient was a woman of about thirty, who was admitted in a comatose state, the breathing somewhat laboured (*leise keuchend*)

and accompanied by tracheal rales. There was no response to any except painful stimuli, and then only by groans or facial contractions. Tendon reflexes slightly increased; pupils sluggish. The face was congested but not cyanosed, and the pulse and breathing were good. These symptoms had developed within some ten to twelve hours after the taking of the above-mentioned dose. On the following day head retraction was observed, and twitchings of the trunk, somewhat tetaniform in character. A pemphigoid eruption was then noted, the blisters on erythematous bases. The urine (removed by catheter) alkaline and dark, but no blood, albumen, or sugar. Pulse 108, fairly vigorous, but the respiration shallow and with occasional pauses.

On the fourth day the stupor had quite disappeared, and the patient was steadily recovering.

Dr. Hald is of opinion that the head retraction and the tetaniform twitchings may have a certain diagnostic value, as similar symptoms were observed in Gerhartz's case of veronal poisoning.

The probability is that the whole of the 9 grammes were absorbed, as the washing out of the stomach did not occur till eight hours had elapsed.

HARRINGTON SAINSBURY.

On the Hypnotic Action of Neuronal [*Über die hypnotische Wirkung des Neuronal*]. (*Psych. Neurol. Wochenschr.*, June 18th, 1904.) Siebert, A.

Dr. Arthur Siebert describes his results in the Bonn Asylum with this new hypnotic. Over one hundred patients received the drug in the average dose of 1 gramme, and in about 25 *per cent.* of the cases $\frac{1}{2}$ gramme sufficed; only very occasionally was the dose of 1.5 grammes necessary.

Neuronal is bromyl-diethyl-acetamide; it is obtained by the replacement in the acetamide molecule of 3 atoms of hydrogen by 1 atom of bromine and 2 ethyl groupings respectively. It is a white crystalline powder freely soluble in ether, benzol, alcohol, and oil, but relatively insoluble in water, 1 in 115 parts; this solubility in water is, however, much freer than that of either sulphonal or trional. The drug has a cool, bitter, somewhat menthol-like taste, which seems in certain of the cases to have caused much complaint and to have given rise to discomfort in the oesophagus, eructations, and in two cases to vomiting.

Dr. Siebert considers that the hypnotic value of neuronal is about equal to that of trional—that it is less than that of veronal, as 2 : 3, but greater than that of chloral hydrate, as 2 : 1.5, and greater than dormiol, as 2 or 2.5 : 1.5. The effective doses of these drugs severally will, therefore, be in inverse proportion to these ratios.

In price it about equals veronal, therefore has the great disadvantage of costliness as compared with the equally effective trional.

HARRINGTON SAINSBURY.

A Year's Experience of the Lumbar Puncture [*Un an de ponctions lombaires*]. (*Gaz. des Hôp.*, June 29th, 1904.) Chauffard et Boidin.

We have here the results of a series of observations carried on at the Hôpital Cochin during a period of twelve months. In 140 patients

the cerebro-spinal fluid was thus systematically examined. Of the liquid obtained 5 c.c. were centrifugalised for fifteen minutes, the total sediment collected and spread in three drops, after dilution, on three slides. A positive result was recorded only when the number of leucocytes exceeded five in each immersion field of the microscope. The exact degree of dilution of the residue is not mentioned in the paper.

Eleven cases of tabes were examined, and in nine an abundant lymphocytosis was found in the fluid. These nine showed the Argyll Robertson symptom—only four patients knew of or admitted syphilis. In two cases which did not show lymphocytosis the symptoms of tabes were, however, well marked, though one did not show the Argyll Robertson sign.

In other cases, in which presumptive evidence of tabes was alone present, there was found an abundant lymphocytosis in several. In a *doubtful* case, therefore, the authors consider that the detection of a cerebro-spinal lymphocytosis points to an involvement of the central nervous system and gives a darker forecast.

Nine cases of general paralysis all showed an abundant lymphocytosis with, in two cases, an associated polynuclear cytolysis. Four of these cases presented the Argyll Robertson pupil.

Cases with Argyll Robertson symptom. The authors confirm MM. Babinski, Nageotte, Widal, and Lemierre as to the relationship between this symptom and lymphocytosis of the cerebro-spinal fluid; thus in fourteen cases of tabes or general paralysis with this symptom there was lymphocytosis in each case. In three cases, however, of the pupil symptom lymphocytosis failed.

Thirteen cases of tubercular meningitis gave in each instance a considerable lymphocytosis; in two cases only did the polynuclear elements equal or slightly exceed the mononuclear cells. In nine cases Koch's bacillus was detected.

Three cases of cerebro-spinal meningitis showed a polynuclear cytolysis, with, in the one case, great numbers of the specific *diplococcus meningitidis*.

Nine cases of herpes zoster gave eight cases of lymphocytosis, abundant and rather persistent. The case in which the lymphocytosis failed was a slight one with very little pain.

In a case of hemiplegia and syphilitic meningitis a lymphocytosis was found.

In one case of disseminated sclerosis the results of puncture varied, being at one time negative, at another time (two examinations) positive, and showing a fair number of lymphocytes.

Negative results were obtained in two cases of cerebral tumour, three of epilepsy, essential or toxic, two of carbonic oxide poisoning, one of sulphide of carbon poisoning, one of slight sunstroke, two cases of facial herpes.

Of particular interest are the observations of MM. Chauffard and Boidin on meningeal and cerebro-meningeal hæmorrhages. The latter represent a secondary contamination of the spinal fluid by an escape from the primary focus in the brain. There were ten such cases, whilst in four cases the blood was due to a primary hæmorrhage from the

spinal meninges. In the former group, the cerebro-spinal, we have now, perhaps, a means of diagnosing more accurately between a hemiplegia due to hæmorrhage and one due to softening.

In five cases of softening of the brain the spinal fluid was normal in four instances; in the remaining case there was a slight lymphocytosis.

In cases of mumps a lymphocytosis may arise and, being accompanied by headache and bradycardia, may indicate an inflammatory implication of the meninges.

In certain cases of infection, *e.g.*, pneumonia, typhoid, etc., the lumbar puncture has enabled the authors to determine whether certain nervous symptoms indicated or not a microbic invasion of the central nervous system.

In cases giving doubtful results, the puncture should be repeated at intervals, and by such series of punctures we shall have the means of determining the occurrence of a meningeal reaction in this or that disease.

Lumbar puncture has further a certain therapeutic value, in particular as a palliative for the relief of pain. A case of labyrinthine vertigo is also reported in which the vertiginous seizures were greatly benefited by the withdrawal of 15 c.c. of fluid.

Practically no bad results followed the 223 punctures recorded by MM. Chauffard et Boidin. A little headache was noted; in three cases (two of zona, one a syphilitic case) there was some vomiting. In one case (of pneumonia) a lateral puncture, rather painful, was followed by a hæmatoma, and this threatened suppuration. This single case of mishap would have been avoided by a median puncture.

HARRINGTON SAINSBURY.

Of the Value of the Lumbar Puncture in Mental Disease [*Die bedeutung der lumbalpunktion für die psychiatrie*]. (*Cbl. f. Nervenheilkunde u. Psychiat.*, April, 1904.) Nissl, Heidelberg.

This is an elaborate paper, in which very careful observations were made on the physical characters of the cerebro-spinal fluid, its chemistry—in particular its richness or poverty in albumen—the characters of the formed elements present, and (very roughly) the pressure under which the fluid was held in the spinal canal. The difficulties which stand in the way of accurate pressure measurements are sufficiently dwelt on, and more especially the influence of posture on pressure. Other difficulties relate to the classification of the cell elements found; and here Prof. Nissl finds much to be desired in the way of a standard nomenclature. In like manner the counting of the cells in the sediment after centrifugalising has not been hitherto performed in a wholly reliable way, and comparable results are correspondingly lacking. Dr. Nissl then describes his own technique, and upon this follow extensive clinical and experimental records, for which we must refer to the paper itself.

Surveying his results, Dr. Nissl concludes: 1. That the chemical and cytological examination of the cerebro-spinal fluid is a most valuable adjuvant in the diagnosis of general paralysis provided there is no other sufficient and likely cause for the richness in albumen and leucocytes which the fluid presents, such other sufficient causes being tabes,

syphilitic infection of the nervous system, tubercular and other forms of meningeal infection. In this matter he confirms the statements of E. Dupré. 2. That it is impossible to be too cautious in interpreting the significance of small augmentations in the number of the cells.

For an accurate realisation of the many doubts and hesitations which surround this whole subject we must again refer to the original.

In conclusion, Prof. Nissl criticises the lumbar puncture itself, and on the grounds of the results on healthy people he decides that the procedure is not an indifferent one, but of the nature of an operation which should not be undertaken without the consent of the patient or of his legal representatives if he is himself incapable of giving consent.

The symptoms, which *in health* follow the lumbar puncture, and the withdrawal of a few cubic centimetres of fluid, do not occur at once; in none of Prof. Nissl's cases until from five to twelve hours had elapsed. These same symptoms reminded the observer strongly of seasickness, the patients feeling very well so long as they were recumbent, but so soon as they got up, and often upon the least movement, complaining of headache, nausea, and vomiting. Some of the cases exhibited a peculiar apathy. At the height of these symptoms there was a complete incapacity for work. The symptoms continued from one to eight days. In some cases, besides the headache, there was complaint of pains in the back and in the neck. Exertion generally, and in particular bodily vibration, as caused by travelling by train or carriage, seemed deleterious—so much so that Prof. Nissl lays it down that the puncture must not be performed unless the patient can be at once put to bed.

Similar symptoms were observed *in the insane*. Thus, out of 112 cases of puncture, in 48 pronounced symptoms followed; in cases of general paralysis, however, these effects were not witnessed.

In one case a transitory collapse was observed on puncturing.

As to the quantity which should be withdrawn for diagnostic purposes, this should not exceed 5 c.c. according to Prof. Nissl.

A drawback in the case of a certain proportion of insane patients seems to be in the difficulty of performing the operation without an anæsthetic. In 212 cases of puncture of the insane a short ether narcosis was necessary in 62 cases.

HARRINGTON SAINSBURY.

The Surgery of Idiocy and Insanity. (Journ. of Nerv. and Ment. Dis., June, 1904.) Da Costa, J. C.

In considering this subject, the author first lays down certain facts as to the causation and cure of insanity as a basis for any conclusions which may be reached. He then proceeds to discuss the subject of surgical interference in the various forms of mental disease. In microcephalic idiocy he is of opinion that Lannelongue's operation is quite unjustifiable in uncomplicated cases, as it is not only useless but in some cases actually makes the idiot worse.

He believes that microcephalus is not the result of premature sutural ossification. A microcephalic brain is not a more or less normal brain of very small size, the idiocy resulting from the smallness of the parts present, but is always an abnormal and undeveloped, and in a great

many instances a diseased, brain. Large areas of it may never be developed, and the cells that are present are small and comparatively few in number. If a strip of bone be removed from the skull, new normal cells will not be produced: parts that are entirely absent cannot be created, and powers that do not exist cannot be called into being. The reported improvement after this operation is not due to the surgical procedure. Many cases have been reported at too early a date, and the improvement has not continued. When it has done so it has been due to proper instruction and care, and not to the operation. Sometimes, also, the alleged improvement has been due to the passing away of a maniacal attack.

Trephining, he thinks, may be justifiable in complications such as certain forms of epileptic seizures, muscular spasm, muscular rigidity, or paralysis, which operation may relieve such complications and contribute to the patient's comfort, but he does not believe that it will benefit the mental condition. He also thinks that trephining may be justifiable in traumatic idiocy, or in cases of idiocy in which definite pressure symptoms arise.

In chronic hydrocephalus, he approves of MacArthur's operation, in which the fluid of the ventricle is drained into an area from which absorption can take place, and infection, the great danger of external drainage, is avoided.

In epileptic insanity, he advocates operation if there be evidence of head injury (believing that the procedure may at least lessen the number and severity of the attacks), if there be focal seizures, and in *status epilepticus* to relieve pressure. In the insanity accompanying ordinary essential epilepsy he believes no operation to be of the slightest avail.

Speaking next of operations for paresis, he doubts whether a genuine case of this disease has ever recovered, but he is of opinion that, in a case in which convulsive seizures are marked and frequent, and in which there is evidence of exaggerated intra-cerebral pressure, operation may retard the progress of the disease; but he truly asks, "*Cui bono?*"

In ordinary non-traumatic insanity and paranoia operation is quite useless unless indicated by the existence of some distinct symptom pointing to local brain trouble.

In cases the subject of hypochondriacal delusions the author has never seen the mental condition one whit improved by any procedure looking to the removal of sensations that held the attention. Such an operation, however, may be followed by the shifting of the attention to another region.

He is opposed to Burckhardt's suggestion that a surgical operation should be performed upon the brain in certain cases in which there are vivid and harassing hallucinations. Referring to traumatic insanity, he says that in a case in which insanity has soon followed a head injury, if the site of the trauma is indicated by a scar, a depression of bone, local tenderness, fixed headache, or some localising symptom—motor or sensory—operation should positively be undertaken. In a case in which the insanity has developed later, in which the intermediate period between the injury and the development of the insanity has shown the change from the normal mode of thinking and way of acting

previously alluded to, and in which the site of trauma is indicated by any of the evidences mentioned above, operation should positively be performed.

After quoting several authors as to the supposed beneficial effects of abdominal, gynæcological, and genito-urinary operations on the insane, he concludes by observing that he still believes that it should not be the rule to perform operations upon the abdomen or the genito-urinary organs with the hope of curing the insanity; but he freely admits that such operations should be performed when the disease is of sufficient severity to call for interference, and that in some cases the performing of such operations may be followed by improvement in the mental condition.

A. W. WILCOX.

A Proposal for Surgical Therapy in Moral Insanity [Una proposta di terapia chirurgica nella pazzia morale]. (Riv. di Patologia Nerv. e Ment., ix, July 7th, 1904). Lugaro, E.

The proposal briefly is to treat cases of moral insanity by excision of the thyroid. The author apologises for bringing it forward before experimenting upon its efficacy, because it is necessary first of all to secure the co-operation of the surgeon and the sympathy of the public. The ideal operation, he tells us, would consist in a complete or almost complete thyroidectomy—a mere thyroidectomy, however, the parathyroids being left untouched. He founds his notion of this operation on a comparative study of sporadic cretinism and moral insanity. In the milder cases of the former affection insufficiency of the thyroid reveals itself on the mental side by a certain slowing of the psychic activity, which deprives the intellect of vivacity, but not of harmony and correctness. On the affective side these patients present special points of interest. Their torpidity, particularly, engages the expansive sentiments, those which are the index of an exuberant biological energy. On the other hand, the sentiments of attachment to others, which arise from the sense of their own weakness and need of protection, and the sentiments of sympathy are relatively well developed. In Lugaro's opinion, this is confirmed by the fact that the myxedematous idiots excite far more affection among their relatives than is accorded to idiots of other classes.

With regard to moral insanity generally, a great variety of cases is included under this rubric. A peculiar restlessness is a common characteristic of many, and in some it seems to constitute the entire disease, or, to speak more exactly, the whole anomaly. Such individuals may have normal intelligence, and a correct ethical representation, while they are not devoid of normal affections. Nevertheless, through their impulsive and restless temperament they are incapable of living in society. Their reaction to all offences is prompt. Desire is active, and rebels against every check. Long persistence about any task is impossible. Tolerance, prudence and reflection are absolutely inconceivable. Such people are unfit for social existence, except under singularly favourable circumstances. If it were possible by any therapeutic expedient to deprive them of their exaggerated facility for violent and precipitate reaction, Lugaro believes that it might be enough

to bring them to an almost normal condition. For this class, then, operation is recommended. Partial thyroidectomy can only be suggested, we are told, as an antidote to impulsiveness and constitutional restlessness, and not, of course, for other types of moral insanity. Lugaro seems to have in view that state which von Krafft Ebing described as the maniacal form of constitutional affective insanity rather than what is commonly termed moral insanity. Though he thinks that partial thyroidectomy is not unjustifiable in the same way that castration is, he holds that it should not be performed without the knowledge of the relations and the patient's own consent. He appears to consider the risk of myxœdema very slight, and, at all events, easily combated by thyroid treatment. It seems strange that this learned author should have ignored treatment of what he calls moral insanity with anti-thyroid serum. He cannot be unfamiliar with the brilliant results which are accredited to this method in Graves' disease. It would appear rational to give anti-thyroid serum a full trial before proceeding to the more radical step of surgical operation.

CONOLLY NORMAN.

The Family Care of the Insane in Gardelegen [*Die Familienpflege Geistes-kranker in Gardelegen, Besuch im November, 1903*]. (*Psych. Neur. Wochens.*, June 25th, July 2nd, 1904.) Wickel, C.

Alt's chief reason for establishing family care in Gardelegen was to demonstrate that even at home in Germany this method of treatment could be quickly put in force without the need for educating the population for years beforehand, and that patients suitable for this form of treatment would be happier in families than in an institution like Uchtspringe, where free treatment is carried out to the widest conceivable limit. After 5½ years' experience, it can be said that these objects have been fully attained. The patients in Gardelegen are regarded as belonging to Alt's asylum of Uchtspringe, whence they have been sent, and on the books of which their names are still retained. Gardelegen is a pretty little town containing about 8000 inhabitants, situated almost nine miles from Uchtspringe, or about twenty minutes' train journey. The first patients, four women, were sent there in the autumn of 1898. In January, 1904, 119 patients were in residence, mostly women. In 1903, when the numbers were rapidly increasing, a chief nurse was stationed in the town, and the immediate medical care of the patients, hitherto carried out direct from the asylum, was committed to an experienced medical officer residing in Gardelegen and acting under Dr. Alt, the physician and director of the parent asylum.

There is as yet no central hospital, but such a building is in contemplation.

No family can receive more than two patients. The number of families applying for patients is ever on the increase. Very few to whom the care of patients has been committed have proved unsuitable. Patients are from time to time sent back to the asylum owing to severe physical illness or to mental relapse. The greatest care is exercised in the selection of homes for the patients; it is felt by the citizens to be an honour for a family which is chosen, and it is looked on as a disgrace

when a case is removed. Dr. Wickel vouches that the dwellings are thoroughly clean, fresh, and well kept, the bedrooms cheerful, light, and airy, and the bedding clean. If any room was not in perfect order, the hosts apologised and assigned a reason. Frequently the patient's room contained more furniture than the regulations required, and many rooms had been rearranged or renovated for the special use of patients. The patients themselves were clean, well dressed, well nourished, and wonderfully contented. The hosts showed a good knowledge of the cases under their care, with whom they seemed on excellent terms. On the whole, the impression conveyed was most favourable. An individual case is described of an idiot, æt. 19, who when received by her hostess a few years ago could neither speak nor employ herself, and could not be kept clean without difficulty, who now speaks intelligibly, though little, has learned to sew and patch, is useful about the house, and perfectly tidy. Private as well as public patients are sent to Gardelegen. Relatives are well satisfied with the arrangements. The inhabitants do not overwork, nor make game of, nor annoy the insane, nor have any serious difficulties ever arisen between the asylum authorities and the hosts. The patients mostly belong to the mental classes of congenital and acquired weak-mindedness, and old-standing tranquil paranoia. Considerable profit seems to accrue from treating private patients in this way; and with regard to public patients the maintenance charge alone is about 1½*d.* cheaper *per diem* in family care; or reckoning on the gross account, these patients cost nearly 7*d.* less daily than patients treated in the asylum.

How enthusiastically family care is being taken up in Germany is shown by a note of Dr. Wickel's. Between the date of his visit to Gardelegen in November, 1903, and the publication of his paper the number of patients residing there had risen to 142. He tells us that at Uchtspringe and the neighbouring villages 62 patients are located. Round the newer asylum at Jerichow and its neighbourhood 146 cases are treated, so that the number of patients thus dealt with in the province of Saxony already amounts to 350. CONOLLY NORMAN.

Troublesome Lunatics (Les aliénés difficiles). (Rev. de Psychiat., March, 1904.) Colin.

In this paper, Dr. Colin gives a short account of the system which he is at present organising under the *Conseil-Général* in the Department of the Seine for the treatment of the special class of insane patients whom he qualifies as "troublesome" or "vicious."

As distinguished from the criminal lunatics who commit grave offences, these individuals are merely troublesome, not dangerous; they are, in fact, the class, as well known in this country as in France, who oscillate between the prison and the asylum, and seem equally out of place in both. A good many of them are congenitally weak-minded, and others are chronic alcoholics who trade on their mental symptoms. The inconvenience caused in the Seine asylums by the frequent sojourns of the *quasi-lunatics* of this type has led to the adoption of the plan proposed by Dr. Colin.

This plan consists essentially in the establishment of a number

of special pavilions, in each of which one or two groups of these patients can be dealt with in strict separation from the rest of the asylum population, and under such supervision as to render combinations and revolts impossible. Each separate service has several small workshops, one for every two patients; these all open on to an inspection corridor. In each dormitory the number of beds is similarly limited to five.

At Villejuif, where these lunatics are to be dealt with, the scheme adopted provides for two pavilions for men, each of which will be divided into two totally distinct establishments of sixteen patients each: women patients will be accommodated in a single pavilion for forty-four inmates divided similarly into two groups; while to deal with exceptionally refractory cases there will be two small additional pavilions for ten patients each. Work, though not obligatory, is to be "encouraged," and Dr. Colin anticipates that this can be done so effectually as to deprive the asylum of some of the charm it possesses for the worst class of "repeater." The author does not touch on the question of expense;

W. C. SULLIVAN.

Part IV.—Notes and News.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

ANNUAL MEETING.

THE sixty-third annual meeting of the Association began at 11 a.m. on Thursday, July 21st, 1904, at the Medical Society's Rooms, 11, Chandos Street, Cavendish Square, London, W. Dr. Ernest White, the retiring President, occupied the chair.

Present: Drs. W. Lloyd Andriezen, Fletcher Beach, George F. Blandford, Charles H. Bond, David Bower, Arthur N. Boycott, John Carswell, Alfred W. Campbell, Patrick E. Campbell, James Chambers, Crochley Clapham, Robert H. Cole, Maurice Craig, William Douglas, Thomas Drapes, George J. Eady, Fred. W. Edridge-Green, G. Stanley Elliot, John E. M. Finch, Horace E. Haynes, John W. Higginson, Charles K. Hitchcock, J. Carlyle Johnstone, Robert Jones, Harold A. Kidd, Arthur B. Kingsford, Reg. L. Langdon-Down, H. Wolseley Lewis, Henry C. MacBryan, Henry J. Macevoy, Peter W. Macdonald, Thomas W. MacDowell, William F. Menzies, Charles A. Mercier, Alfred Miller, John Mills, Cuthbert S. Morrison, H. Hayes Newington, Michael J. Nolan, Bedford Pierce, James F. G. Pietersen, Evan Powell, Henry Rayner, John M. Rhodes, Alan Rigden, George M. Robertson, T. Claye Shaw, George E. Shuttleworth, R. Percy Smith, J. Beveridge Spence, Robert S. Stewart, Henry Stilwell, William H. B. Stoddart, Frederic R. P. Taylor, Herbert C. Thomson, T. Seymour Tuke, John Turner, Alex. R. Urquhart, Frederick Watson, Lionel A. Weatherly, Edmund B. Whitcombe, Ernest W. White, Albert Wilson, T. Outtersson Wood, David Yellowlees.

The following sent apologies for non-attendance: Drs. J. Loughheed Baskin, James W. Evans, Charles E. Hetherington, William J. Mackeown, Landel R. Oswald, David Rice, J. Bruce Ronaldson, D. G. Thomson, Alfred F. Tredgold, Adam R. Turnbull, William R. Watson, Mr. Charles D. Wigan.

The following visitors were present: Mr. Bloomfield, Col. Robertson, C.I.E., Dr. Sydney Allen (New Zealand).

The minutes of the preceding annual meeting were held as read, and signed by the President.

ELECTION OF OFFICERS AND COUNCIL.

The President nominated as scrutineers Drs. Macdonald and Taylor. The list, as submitted to the meeting, was confirmed unanimously.

<i>President</i>	R. PERCY SMITH, M.D.
<i>President-elect</i>	Sir JOHN SIBBALD, M.D. (nominated by the Council).
<i>Ex-President</i>	ERNEST W. WHITE, M.B.
<i>Treasurer</i>	H. HAYES NEWINGTON, F.R.C.P.E.
<i>Editors of Journal</i>	HENRY RAYNER, M.D.
	A. R. URQUHART, M.D.
	CONOLLY NORMAN, F.R.C.P.I.
<i>Divisional Secretary for—</i>	
<i>South-Eastern Division</i>	A. N. BOYCOTT, M.D.
<i>South-Western Division</i>	P. W. MACDONALD, M.D.
<i>Northern and Midland Division</i>	BEDFORD PIERCE, M.D.
<i>Scotland</i>	LEWIS C. BRUCE, M.D.
<i>Ireland</i>	W. R. DAWSON, M.D.
<i>General Secretary.</i>	ROBERT JONES, M.D.
<i>Registrar</i>	ALFRED MILLER, M.B.

Members of Council.

South-Eastern Division.—DAVID BOWER, M.D., T. OUTTERSON WOOD, M.D., DAVID G. THOMSON, M.D., H. WOLSELEY LEWIS, F.R.C.S.

South-Western Division.—HENRY C. MACBRYAN, L.R.C.P. and S.Ed., GEORGE BRAINE-HARTNELL, L.R.C.P.

Northern and Midland Division.—RICHARD J. LEGGE, M.D., C. K. HITCHCOCK, M.D.

Scottish Division.—J. CARLYLE JOHNSTONE, M.D., D. YELLOWLEES, M.D.

Irish Division.—A. D. O'C. FINEGAN, L.R.C.P.I., M. J. NOLAN, L.R.C.P.I.

Nominated Members.—A. W. CAMPBELL, M.D., R. B. CAMPBELL, M.B., MAURICE CRAIG, M.D., ROTHSAY C. STEWART, M.R.C.S., F. R. P. TAYLOR, M.D., A. TURNER, M.D.

ELECTION OF STANDING COMMITTEES.

It was moved, seconded, and carried unanimously that the Parliamentary Committee be taken as it stood.

Educational Committee.—The PRESIDENT: The names before you have been adjusted by the Nominations Committee.

Dr. MERCIER.—I propose that to these names be added that of Dr. Lionel Weatherly.

Dr. CARLYLE JOHNSTONE.—I second that.

Dr. SPENCE.—I suggest that the name of Dr. Graham, of Belfast, be added. He has served on the Committee for a number of years, and though he has not attended very often, he is desirous of serving, and will attend more regularly if elected.

Dr. NOLAN.—I second that.

The PRESIDENT.—I put it to the meeting that this list, with those two names added, be received and adopted as the Educational Committee for the ensuing year. This was carried unanimously.

The PRESIDENT.—The next is the Library Committee. Adopted *nem. con.*

TREASURER'S REPORT.

Dr. HAYES NEWINGTON.—I beg to submit my Report, as contained in the balance-sheet.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.—For the Year 1903.

REVENUE ACCOUNT—January 1st to December 31st, 1903.

1902.			Dr.			Expenditure.			Income.			Cr.			1902.		
£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
521	16	2	To	Journal, Printing, Publishing, Engraving, Advertising, and Postage	...	527	9	9	...	...	...	...	...	...	...	...	...
141	8	7	"	Examinations, Association Prizes, and Clerical Assistance to Registrar	...	209	5	8	...	...	...	...	...	...	...	...	...
46	12	3	"	Petty Disbursements, Stationery, Postages, etc.	...	38	14	2	...	...	...	...	...	...	...	...	...
136	12	5	"	Annual, General, and Divisional Meetings	...	132	15	6	...	...	...	...	...	...	...	...	...
51	0	0	"	Rent of Premises at 11, Chandos Street, care of Office, etc.	...	51	0	0	...	...	...	...	...	...	...	...	...
6	6	0	"	Audit and Clerical Assistance	...	6	6	0	...	...	...	...	...	...	...	...	...
98	7	2	"	Miscellaneous	...	122	13	0	...	...	...	...	...	...	...	...	...
5	11	10	"	Library	...	...	...	...	...	...	...	...	...	...	...	...	...
71	4	3		Balance	...	1148	4	1	...	...	...	...	...	...	...	...	...
					...	6	16	5	...	...	...	...	...	...	...	...	...
					£1155	0	6		£1078	18	8				£1155	0	6

BALANCE-SHEET—31st December, 1903.

1902.				1902.			
£	s.	d.		£	s.	d.	
15	13	11	Journal Account, balance of ...	...	...	...	Lloyd's Bank :—Bankers
22	1	11	Examinations Account, balance of ...	...	...	...	New Zealand Stock :
—	—	—	Petty Disbursements Account, balance of ...	...	...	...	5% per cent. value at this date
—	—	—	Meetings Account, balance of ...	...	...	...	Hack Tuke Memorial
21	0	0	Rent Account, balance of ...	...	...	...	Victoria Stock :
—	—	—	Miscellaneous Account, balance of ...	...	...	...	Dr. Paul's bequest
—	—	—	Library Account, balance of ...	...	...	...	New Investment (1903)
44	5	3	Gaskell Fund, balance of ...	...	...	...	Sales Account, balance
1324	7	9	Balance on 1st January	...	...	...	Fees Account, balance...
			Add :—Balance of Revenue Account	...	...	...	Subscriptions Account, balance ...
				
				1331	4	2	
			Deduct :—Decrease in value of New Zealand Stock	...	...	...
			New Zealand Stock (Hack Tuke Memorial)	...	...	...
			Victoria Stock (Dr. Paul's bequest)	...	...	...
			Do. (New Investment)	...	...	...
			Subscriptions written off	...	...	...
				
				63	7	3	
				1267	16	11	
				£1418	9	2	
				£1663	5	5	

E. WOODINGTON.

H. HAYES NEWINGTON, TREASURER.

REPORT OF AUDITORS.

Dr. WHITCOMBE.—I beg to submit the Auditors' Report. Your auditors beg to report that they have examined the accounts of the Association for the year 1903, and certify them correct. In examining [the heavy charge under "Miscellaneous Account," they find this is due to the exceptional expenditure incurred by the Tuberculosis, Rules, and Statistical Committees.

E. B. WHITCOMBE } Auditors.
H. GARDINER HILL }

The item to which we have referred is unusually heavy, and includes a fee of fifty guineas to the solicitors of the Association. In speaking of this I wish the Association to understand that the fee is very small in proportion to the immense amount of work which the solicitors have been called upon to perform. I think that the thanks of the Association are due to them (hear, hear).

Dr. CARLYLE JOHNSTONE.—Would it not be well to append a footnote to the accounts, to the effect that "the following are the chief items in this sum," so that there might be an explanation given in print referring to these miscellaneous charges?

Dr. WHITCOMBE.—We have noted three items: Tuberculosis Committee, £58 os. 10d.; Rules Committee (including the solicitors' fee of fifty guineas), £82 19s. 0d.; Statistical Committee, £29 14s. 0d. The others are unimportant.

Dr. MERCIER.—I would like to corroborate what Dr. Whitcombe said about the valuable services rendered by the solicitors to the Association, not only in regard to the work of the Rules Committee, but also in regard to safeguarding the interests of the Association in the production of the JOURNAL.

Dr. HAYES NEWINGTON.—With regard to Dr. Carlyle Johnstone's suggestion, I see no reason against it being adopted. But it would be very awkward to carry out the contrast in detail between the present and the preceding year as part of the account. I regret that the balance is so small. There has been a large amount of miscellaneous expenditure. I would point out, however, that in all the earning departments the income of the Association is slowly increasing—in the dividends, the sales of the JOURNAL, the sales of the hand-book, and the advertisements. The only decrease has been in the fees for certificates in psychological medicine. So that the Association need not feel anxious by reason of such a small balance; it is a temporary matter, and on the whole we are doing very well indeed. (Hear, hear.)

Dr. PERCY SMITH.—I observe that our liabilities amount to £395, as against £104 in 1902; and that there are still outstanding £99 17s. 9d. on miscellaneous account. I presume that this sum has not been paid, and that the Association has yet to meet it?

Dr. HAYES NEWINGTON.—The amount outstanding at the end of the year is larger than it was the year before; but, *per contra*, the amount at the Bank is larger, especially as there has been £200 spent out of the money balance. The accounts are not rendered to me, and therefore I have no means of paying them before December 31st. They have been paid since.

REGISTRAR'S REPORT.

The REGISTRAR informed the meeting that he had no Report to make.

REPORT OF THE EDUCATIONAL COMMITTEE.

Dr. MERCIER.—The Committee has dealt with a large number of remits from the Council, and made recommendations to that body which have uniformly been adopted. It has also revised the regulations for the nursing examinations with a view of securing more satisfactory results. It recommends to the Association—"That the period of training nurses and attendants be prolonged from two to three years, provided that one of them may be taken in a general hospital." I move that the Report be received and adopted.

This was duly seconded.

Dr. URQUHART.—I desire to submit an amendment.

A MEMBER.—Is the conclusion a matter which is separate from the Report?

The PRESIDENT.—It is part of the Report.

Dr. CARLYLE JOHNSTONE.—I presume the Report implies that the motion carries with it the recommendation of the Educational Committee?

The PRESIDENT.—Certainly.

Dr. URQUHART.—If the conclusion stands as part of the Report, I move to strike out the words after "years"—that is to say, to strike out the words "provided that one of them may be taken in a general hospital."

Dr. CARLYLE JOHNSTONE.—I rise to a point of order. I do not think it is competent for us at this time to discuss this subject. It is on the agenda at a later period. Dr. Urquhart can introduce his amendment then.

The PRESIDENT.—With that promise, will Dr. Urquhart let the Report go forward?

Dr. URQUHART.—Certainly.

Dr. BOWER.—I propose that the Report be received. We can discuss the recommendation separately. There are two kinds of voting: a simple majority may receive the Report, but the passing of this motion will require a three-quarters or two-thirds majority.

Dr. MERCIER.—The motion before the Association is that the Report be received and adopted, including this particular motion.

Dr. CARLYLE JOHNSTONE.—This is merely the Report of the Educational Committee, and it may be received and adopted, but it is not binding on the Association in any way whatever.

The PRESIDENT.—You can receive and adopt this Report without being in any way bound by the suggestion of the Educational Committee.

Dr. BOWER.—Is that your ruling, sir?

Dr. MERCIER.—Surely, sir, if the Report embodying this resolution is adopted the resolution is adopted. (Hear, hear.) The whole is greater than a part.

Dr. HAYES NEWINGTON.—It is a very common mode of procedure. If there is a motion which is a special motion put forward by anybody for the Committee, it is taken as part of the Report of the Committee, and I should say it is perfectly competent, subject to the ruling of the President, to take that now in connection with the Report of the Committee. It was bound to go on the agenda as a separate motion, because it goes further than the ordinary procedure of the Report, in so far as it proposes an alteration of rules of the Association. Dr. Bower is right in saying that any alteration of the rules of the Association does require a specific majority.

Dr. MERCIER.—It is a bye-law, not a regulation.

The PRESIDENT.—I think we shall be helping matters if we first take it that this Report be received. Dr. Bower has proposed it.

This was duly seconded.

The PRESIDENT.—It has been moved as an amendment that the Report be received. That has been duly seconded.

The amendment was then put and carried.

The PRESIDENT.—The Report is now received.

The PRESIDENT.—I will now ask you to consider: "The Motion involving alterations of the Articles or of the bye-laws for the time being in force: 'That the period of training nurses and attendants be prolonged from two to three years, provided that one of them may be taken in a general hospital.'"

Dr. URQUHART.—After all this preliminary discussion, I shall not take up your time with much talk on this matter. I most strenuously object to the words, "provided that one of them may be taken in a general hospital." This is a motion presented by the Education Committee: it has not the authority of the Council of the Association, and it is pressed by the Educational Committee in defiance of the finding of the Council of the Association. (No.) It is. I appeal to you, Mr. President. There was in the Council a majority of 11 to 8 for the deletion of these words.

Dr. YELLOWLEES.—It was the duty of the Educational Committee to report to the Association, and not to the Council. They have reported to the Association, and now we are discussing their Report.

Dr. URQUHART.—It came before the Council, and now it has come before the Association. (Hear, hear.) I object to the retention of the two years system. Practically all our general hospitals have agreed that three years is to be the period

of training; and at the Edinburgh Meeting of this Association six years ago, the two years system was carried by the majority of one. (Hear, hear.) Our nurses and attendants should have the benefit of three years' training before they are let loose upon the world as competent mental nurses. I claim that there is nothing in the conditions since the Edinburgh meeting that has led to any alteration in the opinion of that large minority. If the movers of this motion had obtained reciprocity for us, if the general hospitals of the country would permit our nurses to count one year off in respect of our training, there might be something to be said for the motion; but I object to their being placed in an inferior position in any respect. I shall not detain you further, but hope that the Association to-day will come into line with general educational authority in nursing on this point.

Dr. MENZIES.—I beg to second Dr. Urquhart's amendment.

Dr. YELLOWLEES.—Dr. Urquhart has correctly stated that this motion was submitted to the Council, but he did not tell you that it was passed unanimously in the Educational Committee, and that before the Council it was only defeated by three votes—eleven to eight. Whatever bearing that may have upon procedure, it has nothing to do with the merits of the question. The question is, How are we to get the best nurses possible, and what training will make them the best nurses? I should like a little consistency in our dealing with this subject. Up to this point we have been content with the two years; and unfortunately, we have included under this period many nurses who, I honestly believe, ought not to have been included. They have come from very small institutions, where the cases were few and very few of them recent; where sickness was scarcely seen at all; where the nurses were rather ladies' maids to old demented, or something of that kind; where they saw a certain amount of insanity, and got some knowledge of it, but where they had no practical knowledge whatever of nursing. That abuse we should, if possible, provide means of rectifying. On the broad question as to which of the two is the better nurse, a nurse who has had three years of asylum training as a nurse, or one who has had two years of asylum training and one year in a general hospital, my own mind is quite clear.

Dr. CARLYLE JOHNSTONE.—What is a general hospital?

Dr. YELLOWLEES.—It is a place where nursing certificates are granted, where there is a large amount of disease, and where our nurses could get experience in sick nursing. In many asylums they get this, in others they do not get it at all. Those whom we certify as mental nurses should possess a practical knowledge of sick nursing. Most of them know very little about it except from our hand-book. With regard to reciprocity, that is not a matter which it befits our dignity to insist on, nor does it affect our duty. It is our duty to get the best training for our nurses. I believe we should be glad to reciprocate, and to give a hospital-trained nurse liberty to get our certificate in two years. I think that in putting this addendum to our resolution the Educational Committee is right, and that after two years' asylum training a woman will be a better nurse if she has one year in a good infirmary than if she had remained a year longer in the asylum. The Educational Committee *nem. con.* passed this recommendation, and I hope that it will be carried by this meeting.

Dr. CARLYLE JOHNSTONE.—I am not prepared at this moment to vote either for the motion or for the amendment. Though the motion, I understand, is the unanimous finding of the Educational Committee, there is no doubt, I think, that the Educational Committee felt a good deal of hesitation on the matter. I do not think that I voted on the question. So it is putting the matter a little strongly to say it is the unanimous recommendation of the Educational Committee. There is one thing with regard to Dr. Yellowlees' proposal which I think should be definitely fixed before we agree to it, if we do agree to it at all; that is, I think we should understand what is meant by a general hospital. That must be defined.

Dr. YELLOWLEES.—A hospital that trains nurses and issues nursing certificates.

Dr. CARLYLE JOHNSTONE.—We should define that point. We should define a general hospital as a hospital having so many beds for surgical cases, and so many for medical cases. It can be defined, and it will require to be defined. And there is another point, which I only refer to now because I, and perhaps some others present, will move an amendment later on on these lines. It is that the period of training should be carried out in one institution. That amendment will be moved,

and I only mention it now so that members may bear in mind that the motion, whatever it is, is subject to further amendment, which will be moved later.

Dr. WHITCOMBE.—I would like to point out that this clause is a purely permissive one, and therefore I see no reason for the suggested further amendment, because it gives the power to nurses and attendants to take their training in an asylum for three years. The whole thing is permissive. I take it that very few superintendents of asylums would engage nurses to spend two years in asylums and then allow them to go to general hospitals. They would ask a nurse to go to a general hospital for one year, and so have the benefit of that hospital training. It is purely a question of time. The three years can be spent, according to this motion, in an asylum, or two in the asylum and one in a general hospital, as the nurse desires.

Dr. YELLOWLEES.—I was speaking of south of the Tweed.

Dr. WHITCOMBE.—It has not been my experience in England.

Dr. TAYLOR.—I would ask, if the three years' system is to become the rule of the Association, whether that will necessitate alterations with regard to the lectures. The present rule says two courses of lectures must be given. Then also with regard to the hand-book, will any alteration be necessary in the hand-book? The sick nursing part is not very elaborate at present, and possibly that part may be amplified if the three years' training is adopted.

Dr. ROBERTSON.—I have great pleasure in supporting Dr. Urquhart's amendment. There is one point which I do not think members of the Association sufficiently bear in mind—that though there are resemblances between the training of nurses in general hospitals and those in asylums, there are also very great differences. A very important difference, which influences the management of the insane, is that nurses go to general hospitals in order to get a diploma to enable them to practise privately afterwards, in exactly the same way as medical men go to a university to get a degree which will enable them to practise privately. The majority of sick people are not sent to hospitals; they are nursed in their own homes. On the other hand, the vast majority of insane people are treated in asylums. And what we want to do is to train nurses so that they may remain in asylums, and that experience of nursing may be gained for sick people in asylums. Therefore the longer we can get nurses to stay in asylums the better it will be for asylums and for insane people. (Hear, hear.) One of the faults of the two years' training is that, in the majority of cases, the moment our nurses have taken the certificate for proficiency in mental nursing they leave asylums and go to private practice. My experience is that we lose their services after two years, and if we can do anything which will make them stay a year longer in the asylums it will be to the advantage of our patients, as well as to themselves. I believe that one of the weak points in connection with Dr. Yellowlees' suggestion is, that nurses will leave asylums after two years and go to general hospitals to get trained as hospital nurses, and thus we lose them altogether. If a nurse takes one year to start off with in a general hospital, and then comes to an asylum, or if they will come back after general training, the asylum will benefit. What we want is to induce these nurses to come back and practise in asylums.

Dr. BEDFORD PIERCE.—I believe it is exceedingly important that we should use measures to get our nurses to stay longer with us. We have at the Retreat followed the practice of engaging nurses for four-year terms, without difficulty, and with considerable benefit to the institution. I am sure that this has also greatly benefited the nurses' training. And if the effect of this motion will be to reduce the course of training to two years, I believe it will be injurious in many ways. With regard to the suggestion which has been made, that one year of hospital training is a great advantage, I do not think any hospital will take a nurse for one year only unless she pay a guinea a week—I speak of the good hospitals—and a guinea a week is more than most of our nurses can afford to pay.

Dr. OUTTERSON WOOD.—It has been stated before that the difficulty is, that large hospitals will not take asylum-trained nurses at any price for one year only. They have to go through the full hospital course, whether they have been in asylums or not. There can be no doubt that by increasing the period of training in asylums for our nurses to three years we shall get the best results. At the same time, there is a good deal to be said on the other side, namely, giving the nurse

who has had twelve months' hospital training her certificate after two years' training in an asylum. There can be no objection to that. But I agree with Dr. Robertson that it is not right for us to retain nurses for two years and then allow them to slip through our fingers, after they have had the benefit of our training. They never come back, but prefer three guineas a week in private work because they are asylum-trained, or they remain general hospital nurses.

Dr. SPENCE.—It is true that in the Educational Committee this resolution was supposed to have been passed unanimously. It would have been better to have said that it was passed *nemine contradicente*, because there were many who objected to this motion as it stands. Personally, I did not agree with it. If it had been put in this way, that a nurse who had already received a general certificate from a properly recognised hospital might receive a mental certificate after two years' training in an asylum, I think it would have been better, and in agreeing to the motion in this form you would simply be doing your duty. You must do your best from the nursing point of view. I must say that Dr. Robertson's point of view is rather selfish. It is true that we should do our best for ourselves, as probably most of us do, but as we get older, I think we feel that we want to try to do something for other people as well. (Hear, hear.)

Dr. MACDONALD.—As one of those to whom this matter was referred, I should like to speak of what has been the feeling of many. I had a great difficulty in getting a consensus of opinion on one point, *vis.*, as to the year of hospital training. One or two said they thought it would be an advantage, but, on the whole, opinion was against it, because it was regarded as impracticable. The only feasible suggestion made was that the first year of nursing training should be spent in a general hospital. All objected strongly to training a nurse for two years and then losing her by her going into a general hospital. I may say that almost 90 per cent. of those who replied to my secretarial postcard are in favour of the term being prolonged to three years. One or two expressed themselves very strongly that the term of three years should be served in one institution. (Hear, hear.) And, personally, I do not grant a certificate to any nurse who has not served for three years within our own walls. (Hear, hear.) Therefore, I cannot support Dr. Yellowlees' motion, and shall vote for the amendment.

Dr. YELLOWLEES.—Are there not Reports from all the divisions? I am glad that Dr. MacDonald has told us what he has ascertained.

Dr. NOLAN.—To some extent it was thought in Ireland that this would be a limited operation. The fact is, that the applicant who has come into an asylum after a year in a general hospital is usually a failure. We thought that the proposal would be limited and permissive, and so unanimously adopted the motion.

Dr. BOYCOTT.—The meeting of the South-Eastern Division was held before this matter was referred to them, and we have not had a meeting since. Our next meeting will be held in October.

Dr. MACDONALD.—The same applies to the Northern Division; we were simply told of it.

Dr. CARLYLE JOHNSTONE.—At the meeting of the Educational Committee I moved that it be referred to the Divisions. The object of that was to ascertain the views of the Divisions. We have not got the views of the Divisions to-day, and I think that this is not a very business-like way of treating such an important subject.

Dr. BOYCOTT.—It is impossible to hold meetings of a Division at odd times whenever such matters may be referred to them. The Divisions hold their meetings on certain dates, which have to be fixed beforehand.

On being put to the meeting, there voted for Dr. Urquhart's amendment 13 and 7 against.

The PRESIDENT.—I declare the amendment carried. I will now put the amendment as a substantive motion.

Dr. CARLYLE JOHNSTONE: I wish to move an amendment.

Dr. BEDFORD PIERCE.—I wish to move an amendment. My amendment is that following on the words, "That the period of training nurses and attendants be prolonged from two to three years," the words be adopted: "Provided that the

term of training be two years in the case of certificated nurses who have been trained for three years in a general hospital which is recognised by the Council."

Dr. YELLOWLEES.—I second that with much pleasure, sir.

Dr. ROBERT JONES.—I am very glad to have the opportunity of supporting the amendment at present under consideration, as it will enable us to encourage fully trained hospital nurses to join our asylum service, and so qualify in both hospital and asylum nursing. I have had nurses who have come to me from hospitals, and who have served in the asylum for two years in order to get the medico-psychological certificate for mental nursing. I am in thorough accord with anything which will give facilities for getting into our asylums more hospital-trained nurses. They are of the utmost value. Since Claybury has been opened as a county asylum we have had a large number of women who have been delivered of children. We have performed important surgical operations, and for this it is necessary that the nurse should follow and understand the practice of antiseptics and the use of surgical dressings. I support the amendment with pleasure.

Dr. MERCIER.—It will throw a very heavy duty on the Council if they are required to recognise every general hospital which grants certificates to nurses. Can we not take the *dictum* of some other body? Is there not some other body which takes up such matters? Does not the Royal British Nurses' Association already recognise certain appropriate institutions, and guarantee them to be sufficient? If we could take that guarantee, instead of setting up one of our own, it would save us trouble.

Dr. BEDFORD PIERCE.—I think we should manage our own affairs.

Dr. MILLS.—I think we should define a general hospital to be one recognised by the Local Government Boards in England, Ireland, or Scotland, or by the Colleges of Surgeons and Physicians, or the universities of those countries. That would define a general hospital better than throwing the responsibility on others.

Dr. BOYCOTT.—There are two separate questions here. One is that our nurses shall have three years' training; and the other is, whether one of those years be omitted for the hospital-trained nurse. I think it is better that the amendment which was proposed by Dr. Urquhart should stand, and that the other question should be regarded as an entirely different one afterwards. If it could be put down definitely that the period of training of the nurse should be three years, it could afterwards be arranged if the Association thought one of those years might be omitted for hospital nurses.

The PRESIDENT.—The motion now is, that the period of training for nurses be prolonged from two to three years. The amendment to that is, "Provided that the term of training be two years in the case of certificated nurses trained for three years in a general hospital which is recognised by the Council."

Dr. SPENCE.—It is a pity it should be put in that way, "recognised by the Council," because, as the Secretary of the Educational Committee has said, it would entail a lot of additional work and responsibility on the Council, and I think we can reasonably object to that. I suggest that we should go to the Royal British Nurses for their opinion on the matter. I understand that, this Session or next, there will be a short Act of Parliament governing the registration of nurses. Nurses who are placed on that Register might be recognised by us as nurses who could have their training in our asylums limited to two years.

Dr. CARLYLE JOHNSTONE.—The Council will naturally recognise an institution which is recognised by the existing authorities on the subject.

Dr. ROBERTSON.—I do not think there is much difficulty in defining the standard which should be recognised. It has been investigated very thoroughly by Sir Henry Burdett; there are hospitals with 100 beds, half of which are medical, and half surgical. These are recognised as affording a sufficient training, and then there would be no difficulty.

Dr. SPENCE.—But it does not follow that because a hospital has 100 beds training would take place.

Dr. BOWER.—The wording leaves it free to the Council to decide when they have time to discuss the subject.

There voted for the amendment 24, and it was declared carried by a very large majority.

Dr. CARLYLE JOHNSTONE.—I move as an amendment, "That the period of asylum training be carried out in one asylum." (Hear, hear.)

Dr. PERCY SMITH.—Where are the words to be put in? It makes it a very complicated sentence.

The PRESIDENT.—I rule that amendment out of order.

Dr. CARLYLE JOHNSTONE.—I would like to explain how it is in order, because this motion does not alter the existing rules with regard to this fact, that at present the nurse may receive a short portion of her training in one asylum and another portion in another asylum. This does not alter that. I propose that the training should in future be all in one asylum.

Dr. MERCIER.—On a point of order, I suggest that that is no amendment.

The PRESIDENT.—I have ruled that it is no amendment.

Dr. MERCIER.—Notice must be given of such an amendment.

Dr. CARLYLE JOHNSTONE.—Has notice been given of the other?

The PRESIDENT.—It was carried as an amendment of a motion of which due notice was given.

Dr. CARLYLE JOHNSTONE.—Mine is an amendment of a motion of which notice has been given. I think I am entirely in order.

The PRESIDENT.—I am afraid I must rule you out of order. Is there any further amendment? Then I put the motion with the last carried amendment as a substantive motion.

Dr. WHITCOMBE.—May I ask when this comes into effect? A large number of nurses are training for the November examination, and it may affect them.

Dr. BOYCOTT.—Is this hospital training to take place before or after the asylum training?

The PRESIDENT.—You must take it as it reads.

The motion as amended was then put as a substantive motion, and carried.

Dr. CARLYLE JOHNSTONE.—I will bring up my motion at another time.

Dr. PERCY SMITH.—There has been no answer to Dr. Whitcombe's question as to when this is to come into force.

Dr. MERCIER.—It makes a very material alteration in the regulations for the examination, and, as Dr. Whitcombe has said, a large number of nurses are training under the existing regulations, and they ought to have sufficient notice of this new rule. On previous occasions we have always given ample notice, usually twelve months or so; and I think the same notice should be given now.

Dr. SPENCE.—It would be wise, now that the Association have expressed their opinion, that the whole matter should be referred to the Educational Committee, in order that they may take such steps as will bring it into full working order and give the proper notice. That cannot be done in a day.

Dr. YELLOWLEES.—With powers, I understand?

The PRESIDENT.—Yes, with power to deal with it.

Carried.

REPORT OF THE PARLIAMENTARY COMMITTEE.

Dr. FLETCHER BEACH.—The Parliamentary Committee beg to report that as the Lunacy Bill introduced into the House of Commons by the Attorney-General deals chiefly with the care of incipient lunatics, and embodies to a great extent the views of the Association, it has not been necessary for the Committee to take any action in the matter, nor has it been necessary for the sub-Committee appointed by the Parliamentary Committee to confer with the sub-Committee appointed by the British Medical Association.

With regard to the London County Council Lunacy Bill, no action has at present been taken, but if the Bill comes up at any future time, the Committee will be prepared to move in the matter and bring the views of the Committee before the Lord Chancellor and the Commissioners in Lunacy.

As regards the two Registration of Nurses Bills, the framers of those Bills have been communicated with, but the representation of the Association on their Committees is considered inadequate, and the Committee have laid their views before the Council.

Dr. Rayner having raised the question of the best means of insuring that persons of weak mind should only be received into the houses of suitable and respectable persons, the Committee, being of the opinion that it is not competent to deal with the question, recommend the Council to appoint a Committee to examine it and report.

I move that this Report be received and adopted.
This was duly seconded and carried.

REPORT OF THE LIBRARY COMMITTEE.

The Committee, in order to make the Library more generally useful by developing the circulation of books to members, recommend:

1. That a sum not exceeding £50 be granted for expenditure in the purchase of new books, binding, etc.
2. That a subscription up to £10 10s. if necessary be paid to Lewis, entitling the Library to the loan of books.
3. That members be invited to present books suitable for the Library.
4. That the Library be open daily to members during certain hours, that it be kept warm and comfortable, and that writing materials be supplied.
5. That the honorarium to the Medical Society's Librarian be increased by a sum of £5, subject to further increase at the discretion of the Council for extra services as Acting Librarian.
6. That the following Rules be submitted for the Regulation of the Library.
 - (a) That certain books be confined to the Library by order of the Committee.
 - (b) That no book be injured or defaced by writing or otherwise.
 - (c) That only one book at a time be taken out by a member unless by special permission of the Committee.
 - (d) That no book be taken from the Library until it has been entered by the Librarian.
 - (e) That a member in whose name a book is entered be responsible for its return or for the value of its loss to the Association.
 - (f) That any book may be recalled by the Librarian after a fortnight.
 - (g) That members be liable for prepossession of books.

Dr. R. H. Cole has been appointed Honorary Librarian, *vice* T. Seymour Tuke, resigned.

Dr. FLETCHER BRACH.—We have had to make a slight alteration in No. 5, because Mr. Hall, who now acts as our Librarian, is about to resign, and it would be better, therefore, when we make our arrangements with another Librarian that we should have a free hand in dealing with him. The Treasurer has agreed with what has been proposed. I move that the report be received and adopted as amended, and that it be referred to the Council to take action.

Dr. URQUHART.—Is there not a necessity for proceeding with this at once? Would it be possible for the new Council to meet to-morrow morning, as Mr. Hall is ill, and must leave very soon? It would be also a favourable opportunity for the new Council to give notice of motions, or to consider special business. I think it would be in the interests of the Council generally, and in the interests of the representative members of the Council who may be sent here for special business, to have a short meeting of the new Council on the morning of the second day of the annual meeting.

Dr. PERCY SMITH.—It is impossible to summon the new Council now; there may be some who are not here.

The PRESIDENT.—I do not think that the suggestion is in order. It has been proposed that this Report be received and adopted, subject to the modification inserted.

Dr. MORRISON.—Who recommends the books for the Library? Is it open to the members of the Association to suggest the purchase of any books, or is that entirely in the discretion of the committee?

Dr. FLETCHER BRACH.—If any member of the Association will suggest books we will be only too glad to consider the suggestion.

Dr. MERCIER.—I protest against the time of the Association being taken up with such a trifling matter. It is, of course, open to Dr. Morrison or any other member to approach the Library Committee.

The resolution was then put and carried.

THE LIBRARIAN.

The PRESIDENT.—I will now ask Dr. Jones, the General Secretary, to introduce

a motion which has been adopted by the Council, regarding Mr. Hall, the custodian of our Library.

Dr. ROBERT JONES.—Mr. Hall has written his resignation, and is leaving, under medical advice, as his health is very seriously impaired. He has rendered very valuable services to the Association for a period of over ten years, and he is now about to go. The Council felt they were parting with him with very great regret, and that they would like to do what they could to make it easier for Mr. Hall to leave his post. It has already been proposed, seconded, and carried unanimously, in the meeting of Council, that the sum of twenty guineas be voted out of the Association funds to Mr. Hall. This matter, I think the President will state, is entirely within the power and discretion of the annual meeting to deal with, and it was hoped the proposal of the Council would meet with the approval of the annual meeting.

Dr. URQUHART.—I have been asked to second this motion. I cannot say it is a pleasure to me to second it, because Mr. Hall has been one of the most valuable officials that this Association has had. Perhaps he has not been so much in contact with the Association generally as with its officers. He has been most careful of our interests, and I hope the Association will mark our appreciation of Mr. Hall by voting this parting gift. His health is very precarious. The Medical Society is doing something for him, and I hope that the British Medical Benevolent Fund will not forget him, for he has long been their collector, and has brought large amounts of money into that worthy charity. Mr. Hall has served us for ten years, and I hope you will not consider that the Council has been extravagant in approving of this motion. I may especially add that the Treasurer sees his way to meet this expenditure.

The proposal was unanimously agreed to.

EDITORIAL REPORT.

This was presented by Dr. RAYNER, and is as follows :

"The past year offers little for comment or report from the editorial staff. The issue of the JOURNAL has again been increased, from 1,050 to 1,075, to meet the advance in the numbers of the Association. The endeavour to duplicate the exchange of Journals recently made, with the sanction of the Council, has met with some success, several Journals having accepted the offer. These duplicate copies will be placed at the service of the Library. One or two Journals have offered to exchange for past periods extending over several years. As the stock of past numbers of the Journals is considerable, and such an exchange would be of advantage to the Library, the Editors recommend that in suitable cases such exchanges should be carried out. The Editors desire again to record their appreciation of the valuable assistance afforded them by the assistant-Editors, Dr. Chambers and Dr. Lord."

Dr. URQUHART.—I move that the Report be received, adopted, and entered on the minutes.

. This was duly seconded and carried.

REPORT OF COUNCIL.

Dr. ROBERT JONES, as honorary secretary, presented the Report as follows :

"The past year, 1903, has been somewhat memorable as recording the completion of the reconstitution of the Association. It will be remembered that in May, 1901, a special committee was appointed to consider—

"1. The reprinting of the rules.

"2. The addition of amendments which had been made from time to time; and

"3. The introducing of such others as the Committee thought necessary.

"This Committee reported to the Annual Meeting, 1902, in Liverpool, at which meeting it was further decided to appoint a new Committee to reconsider the matter after it had been referred to the Divisions. This last Committee reported in July, 1903, and, to confirm and to legalise its findings, one extraordinary meeting was held on November 18th, and two more were held on December 17th, with the result that the Association has been practically reconstituted. Some of the main features of the new constitution are—the appointment of a Nominations Committee; the auditing of the accounts of the Association by two members outside

the Council; the registration and publication of attendances of officials for two years; fixing the dates of all general and divisional meetings a year in advance; and a general elasticity of the rules, permitting the devolution of more power and interest to the Divisions. These changes have incurred a very considerable increase in the duties of all the officers of the Association, but the thanks of the Association are especially due to the Chairman of this Committee, Dr. Urquhart, for the active, energetic, and business-like interest he has taken in the work of carrying these changes through.

"The Association continues to increase in membership and prosperity, and the following tabular statement shows the increase during the past seven years:

	1897	1898	1899	1900	1901	1902	1903
Ordinary Members .	524	540	560	568	580	586	597
Honorary do. . .	38	38	36	38	37	37	36
Corresponding do. .	12	12	12	10	11	12	12
TOTAL . . .	574	590	608	616	628	635	645

"During the year 1903 there were twenty-six resignations; four members died—Drs. Thomas Patrick O'Meara, John Glen Forsyth, Robert V. Fletcher, and one honorary member, Dr. Norton Manning. Ten names were removed from the register for non-payment of subscriptions, and fifty were elected—a net gain of ten members.

"The Council note with much satisfaction that the Statistical Committee have now presented their Report, which has been circulated to every member of the Association. The Council hereby desire to place on record the indebtedness of the Association to the Committee for its voluntary task; more especially do they appreciate the directing authority of its Chairman, Dr. Yellowlees, and the services of its able Secretary, Dr. Bond.

"The Parliamentary Committee has requested the Council to submit to the Educational Committee the advisability of extending the period of training for the Association's Certificate in Nursing from two to three years. The Committee has also taken action in regard to the Bill before Parliament for the Registration of Nurses.

"The Educational Committee has given special attention to the examinations, both for the Certificate of the Medico-Psychological Association for proficiency in Mental Nursing, and also for proficiency in Psychological Medicine. It has also issued a new syllabus for the latter examination. It has brought forward a motion to be considered at the annual meeting, after having been submitted to the Divisions, in regard to the period of training for nurses.

"The special thanks of the Association are due to the Registrar, Dr. Alfred Miller, for his time and valued services, as also to Dr. Mercier, the Secretary of the Educational Committee.

"The papers read during the year, both at the General and Divisional Meetings, have attracted good attendances and given rise to interesting discussions. The thanks of the Association are due to Dr. James Neil for entertaining the members and permitting them to hold their meeting at the Warneford Asylum, Oxford, on February 12th, 1904.

"The President, Dr. Ernest White, has directed the affairs of the Association with courtesy, dignity, and impartiality. He has presented a gold badge, to be worn by the President of the Association for the time being, and which to-day, for the first time, distinguishes the Presidential office. The Council desire him to accept their warmest thanks for his great interest in the affairs of the Association, and they also desire that he may long enjoy his retirement. He carries into his leisure the kind feeling of every member of the Association.

"The Editorial Staff have more than kept up the good reputation of the JOURNAL, and the Council thanks all its officers for their whole-hearted services."

Dr. YELLOWLEES.—I move the adoption of that Report, and I am sure we shall agree in thanking our General Secretary for his untiring energy and efforts.

Dr. SPENCE.—I cordially second the motion for the adoption of the Report. I have only one word in criticism to offer, and that is, that we do not have the opportunity of seeing these Reports before we come into this room.

The PRESIDENT.—Is it your pleasure that the Report of the Council be received and adopted?

Carried unanimously.

STATISTICAL COMMITTEE.

Dr. YELLOWLEES.—I have the honour, as Chairman, to submit our Report; and I need say very little about it, as it has been in your hands already, though not for so long a time as we desired. Still, it has been presented at the earliest possible moment. I would say one or two words generally, without entering into any discussion. The keynote of our work was this: we felt that an asylum physician had something more important in his life than statistics, that he is already burdened far too greatly with statistical labour, and that our great effort must be, if possible, to simplify that labour, and lessen it. We felt, as the Association has long felt—and three of your present Committee, Dr. Rayner, Dr. Hayes Newington, and myself, were on the old Committee—that the old tables which we have used so long should give place to new tables upon different lines. We tried to lessen the work with regard to the tables, and with regard to the many communications and requests made by the Commissioners for additional information. I hope we have succeeded in that attempt. We have divided our tables into four groups: admissions, discharges, deaths, and residues. We have chosen only such tables and such information as we think of real and practical value, correlating as far as we could when correlation seemed of importance. But the essential and important part of our scheme is this: The Medical Register which we propose is something quite different from the present Medical Register, and is altogether separate from the Civil Register, which contains legal and social facts; its peculiarity is that it shall contain every fact required for the compiling of the tables, so that if this Register be accurately kept throughout the year, and filled in by medical authority, that Register alone will supply, at the end of the year, the material for the whole of the tables. They need never be touched by a medical authority again; but all the tables can, from that Register, be compiled by a clerk. I think that a very great convenience, and I hope the Association will think it so too. It involves a certain amount of clerical work daily, say in filling up one or two lines of the Register; but at the end of the year the thing is done; and then one month from the end of the year the completed tables can be ready for the printer. More than that, we have, with the consent of the Council, and with your consent, approached the Commissioners in this matter. After conference and full consideration the English Commissioners, to our great satisfaction, have expressed their willingness to divide the Register into a Civil Register and a Medical Register, and have expressed their provisional approval of the Tables and Register which we have suggested. I think that is a very great gain. It is the first time in the history of this Association that we have had any such conference with the Commissioners, and we gladly acknowledge their courtesy and consideration. This is all I need say at present. It is a scheme which we have worked out after a good deal of patience and endeavour. Its details we lay before you, and submit them for your acceptance or criticism. I formally move the adoption of the Report.

A MEMBER.—I second that.

Dr. CARLYLE JOHNSTONE.—I wish to propose an amendment. We are extremely indebted to the Committee for their labours, but I do not think we are in a position to-day to settle this most important and revolutionary affair. I move that the Report be received and the Committee be cordially thanked for their work, and that the Committee be re-appointed for one year, and in the interval the subject be referred to the Divisions for consideration and report to the Committees. I do not think that the Committee have the slightest desire to rush this

matter through. Naturally they are anxious that it should be terminated as soon as possible, but the members of the Association have only had one week to consider this subject, whereas it has been under the consideration of the Committee for two years. Of course, the compiling of these tables is usually done by the individual members of the Association, and it is going to be done by the superintendents of our county asylums. So first you must carry them with you, and also you have to carry the Boards of Commissioners with you. In Scotland—I do not know what happens in England—that may require a certain amount of legislative enactment. I do not know that the Commissioners in Scotland are prepared to adopt this register at this time. They cannot, because it will have to be altered to suit Scottish arrangements. I do not wish to say anything in the way of criticism—I very largely approve of the recommendations of the Committee—and I do not propose to debate the question.

Dr. ROBERT JONES.—I think Dr. Carlyle Johnstone is right in suggesting that we should not hurry this matter. We have not had time to consider it, and we have before us the recollection of the Tuberculosis Committee. I think it most desirable that this Committee should be re-appointed, with the view of re-considering some of the items, if necessary. I will second the proposition without taking up more time.

Dr. URQUHART.—Does this motion preclude the discussion of this matter to-day? Because there are many questions which might be cleared up at once, without trouble to the Divisions.

The PRESIDENT.—If the matter is to be referred to the Divisions, the less discussion we have now the better. We are already much behind time. We have an amendment before us that the Report be received, that the Committee be thanked for their labours, and that the Committee be re-appointed for a year, and the matter be referred to the Divisions for consideration and report.

Dr. MERCIER.—If this amendment is to be considered as a silencing amendment and as stifling discussion on the matter, it would be a pity, for any discussion that takes place here would go to enlighten the Divisions in their deliberations on the matter. There are some who are unable to attend the Divisional meetings, and they would be shut out from any expression of opinion on the matter. Subject to your ruling, I shall propose upon this amendment to discuss the tables generally.

Dr. CARLYLE JOHNSTONE.—My amendment does not silence it. I have considered the matter for a week, but I do not wish to express any opinion on it.

Dr. MERCIER.—I did not apprehend that was the intention. I hope your ruling, sir, will allow the matter to be discussed.

The PRESIDENT.—Certainly.

Dr. MERCIER.—I would remind the younger members that more than twenty years ago, when the existing tables were first brought into force, I strongly objected to them, and suggested that their proper destination would be to become *tabula rasa*. I remember to-day the genial contempt and quiet scorn which was poured upon my proposal by the then President, Dr. Orange, and the matter has been more or less under my consideration ever since. Perhaps this prolonged contemplation of it may give me some title to an opinion. I know that my friends Dr. Yellowlees and Dr. Spence regard me as a person who objects and opposes for the mere sake of objecting and opposing, without much regard to the merits of the subject-matter under dispute. I wish I could disabuse them of that notion, but, unfortunately, I labour under the infirmity that when I wish to conciliate, I am apt to offend; when I wish to convince, I am apt to provoke hostility; and when I wish to persuade, I only arouse antagonism. Therefore what I say I trust the Association will regard as impersonal—as if it had been spoken by somebody else. At any rate, I think it will be admitted that it is more desirable that this matter should be considered within the limits of this Association, and in a friendly, sympathetic, and benevolent spirit, rather than that it should be discussed and criticised in the world without, in the spirit in which the tables of the Tuberculosis Committee were discussed and criticised. The first comment I have to make upon the tables is to express my earnest and sincere admiration of the large-mindedness and comprehensiveness with which the changes have been made (Hear, hear), and my admiration for the skill and acuteness with which a high degree of order has been evolved out of something

not very far removed from chaos. And in any remarks I may have to make, which will be critical in character, I hope it will be understood that they arise from no lack of admiration for the excellent work which has been done, but rather from an earnest desire that work which is generally so good should be freed from the blemishes which seem to me to exist, and to be capable of removal. I think we have a great opportunity before us; I think we have the chance of getting this scheme adopted generally, not only by the administration of this great country, but by the subordinate and inferior administrations of the Isle of man, Berwick-upon-Tweed, Scotland (laughter), and Ireland; and also that we may set such an example to foreign countries that it may result in an international scheme by which the statistics of insanity of all countries may be comparable with one another. I think that is an object which is fairly within our compass. It is fairly within view if this thing is done judiciously and wisely, and if it is carried out in the spirit in which it has been so far advanced already. The first criticism I have to make upon Table IV, the admission group, is, that there is a note in the written Report that the Committee did not feel either that the time for classification was ripe, or that the suggestion of a new classification really formed a part of the task imposed upon them. Well, that is a task which, after all, they have not been able to escape from. They have been obliged to suggest a classification. Dr. Yellowlees is in the position of the virgin who was immortalised by Lord Byron, who, "murmuring she would ne'er consent, consented." They have had to produce a classification.

Dr. ROBERT JONES.—May I make a personal appeal to Dr. Mercier? There are only fifteen minutes of the morning left, and if there is a general disposition to consider the whole of the Report of the Statistics Committee, we shall have to go through with it. I would like to appeal to Dr. Mercier to allow the discussion to take place later on in the branches.

Dr. MERCIER.—But when will you give the opportunity for discussion? because I think the tables should be discussed. I have no desire to stand between the meeting and further business. ("Go on.") I will endeavour to abbreviate my remarks, but I shall find it impossible to say all I have to say against these tables in the short time allotted to me. Dr. Yellowlees and his colleagues have made a classification. Now, what are the essentials of a good classification? I say they are three. A classification, to be good, must include all the things to be classified and nothing else. In the second place, it should separate things which are different, and associate things which are alike. In the third place, it should not include the same thing under more than one class of the same rank. In that respect I think everybody will agree with me. But I regret to say that all those canons of classification have been violated by Table 4. It does not include all the things which have to be classified. I see in it no place for suspicion, no place for illusion, or hallucination; I see no place in it for suicide, nor for the various phobias and manias; and such very distinct forms or varieties of insanity as acute delirious mania and paranoia have no place in it at all. It associates things which are unlike; it puts together under the same heading such diverse things as morbid hesitation and kleptomania; it puts together under the same heading stupor, which is an anomaly of conduct, and confusion, which is an anomaly of thought; it puts together under the same heading such diverse things as obsession and sexual perversion. And it also includes, in different classes of the same rank, the same thing several times over. Here are classes of the same rank—general progressive paralysis, mania, melancholia, and alternating insanity. Now, I submit that is much the same as placing dropsy upon the same level as acute nephritis, and much the same as placing paralysis as one class on the same level as anterior poliomyelitis. Mania, for instance, is a part of general paralysis; it is a part of alternating insanity; it is surely a part of epileptic insanity; and yet it appears in a place by itself. While I do not maintain that we are, as yet, in a position to formulate a perfect classification of insanity, still, I do think we can formulate a classification which is better than that. I do not think a classification of bodily diseases which spoke of dropsy, and convulsions, and palsy, and lameness, as diseases would be passed by a body of competent physicians. Æsculapius and Hippocrates, Celsus and Galen, Avicenna, Averroes and Rhazes were wise and learned physicians in their day—and I desire to speak of them with all respect; but it is no disparagement to them to say

that our knowledge of mental disorder has advanced since their time; and I think that their nomenclature may fairly be placed beside their theories of the causation of disease; and that mania, and melancholia, terms which have done such good service for three or four thousands of years, may now enter into their long rest and may be placed reverently upon the shelf, in company with "radical heat," "radical moisture," with "inward vapours," and "calid humours," with the three kinds of spirits—natural, vital, animal, and the rest of the mediæval and classical vocabulary. I do not know whether I am going on too long, sir. ("No, no.") The only other criticism I will make is upon the table of causation. I have already expressed in private my objections to this to Dr. Yellowlees. Although it is a great improvement on what we have seen before, it is open to certain radical objections. I pass over my objection to the consideration of heredity as a stress. It seems to me a misnomer and a misapprehension of the meaning of words to call that a stress which is a part of the constitution of the thing to which stress is applied. Passing that over, which may be considered a personal fad, I do take exception to heredity being considered to include these sub-headings alone. What is really indicated by the word "heredity" in the table is inheritance, and no place is left for the consideration of consanguinity or exsanguinity, which are important branches of heredity. And then, what is meant by the inheritance of paralysis? By paralysis do we mean paralysis agitans, or hemiplegia, or alcoholic paralysis, or neuritis, or traumatic paralysis? Or what form of paralysis do we mean? ("All.") Then, if we mean all sorts of paralysis, we are including the inheritance of vascular disease and nervous disease, of diseases of the connective tissue, and so forth, and diseases induced by poisons, all under the same heading. Next, tubercular inheritance. It is now pretty well established that tubercle is not inherited, and I think it is unfortunate that the word "tubercular" should have been used in this connection. I would suggest a return to the old term "scrofula," which sufficiently indicates what is inherited in cases in which tuberculosis occurs. Among the physiological defects and errors I find no mention made of unduly rapid growth, which is an undoubted antecedent of insanity in many cases where insanity occurs in young persons. In (*g*) we find specific fevers as a cause of insanity. I submit it is very important that the period of the fever at which the insanity occurs should be indicated. It may take place in the incubatory stage, it may occur at the maturation of the fever, or it may come as a sequel. I think that should be indicated. I find no mention of hæmorrhage. Hæmorrhage is a very important cause of an intractable form of insanity. And nowhere do I find mention of sleeplessness, which certainly is among the causes of insanity. I should very much like an explanation of the term "neurotic diathesis"; I am entirely in the dark as to what it means. And under heading (*k*), Congenital and Infantile Mental Defect, it seems to me that some of those conditions should come under (*c*), as being inherited; that some of it should come under (*i*), Lesions of the Brain and Spinal Cord, as in hydrocephalus; some of it should be (*g*), as being toxic, as meningitis and syphilis; and some of it under (*k*), as traumatic, as undoubtedly some cases of congenital defect are due to injuries during labour, and so forth. Lastly, there is the cause of previous attacks, and I can only repeat here the criticism that I advanced twenty-one years ago upon this very point, and say that I shall understand how a previous attack can be the cause of an existing attack of insanity when it is explained how it is that a man's eating his breakfast is the cause of his eating his dinner.

Dr. BEDFORD PIERCE.—The words "associated condition" are at the head of the column. We do not say it is the cause.

Dr. MERCIER.—I beg your pardon. That part of my criticism falls to the ground, but the Table then ceases to be a Table of causation. I think I have said enough to show I am in harmony with the principle of Dr. Carlyle Johnstone's amendment. It is not often I am so happy as to find myself in agreement with Dr. Carlyle Johnstone, and if I had had the framing of the amendment myself, it would have been to the effect that the Committee receive from the Association the very warmest thanks for their very skilful, laborious, and meritorious services (Hear, hear), that their request for re-appointment be acceded to and that they be requested to give further consideration to Tables 4 and 6.

Dr. HAYES NEWINGTON.—I congratulate Dr. Mercier on his critical powers.

We can recognise in what he said a lot of the spirit that leads to all-night sitting. You can go on *ad infinitum* with these criticisms, and no doubt they are perfectly just as far as he is concerned. But as far as the Committee are concerned, they knew that Dr. Mercier would hold certain opinions, that A would hold others, and B others, and the Committee have tried to represent a good sound working average of opinions. With regard to those old terms in the nomenclature we have purposely adopted them. Personally, I would sooner label the causes A, B, C, to show that they have no pathological or symptomatological connection with the disease, but that we recognise them as carpet-bags into which to put them in default of a satisfactory classification. Still, that is hardly the question now. We should recognise fully that there is no right to ask this Association to hurry through matters, because we know that there is ground for criticism, and just criticism. That should be heard and acted upon by the Committee. But what we do hope and ask is, that we shall have something more than a general approval of the Report. We have had a lot of delicate negotiations to carry through in connection with bodies, and so on; and we should like the meeting, if it could at an early date, to say that a certain general idea is thoroughly approved of and endorsed by the Association. This general idea, as Dr. Yellowlees has said, is first of all to shape the various Registers into such form that they will receive all the necessary information, and that they could be handed to statisticians to work out, and thus save the medical authorities a great deal of clerical trouble. That idea has involved communicating with authorities. And we should now like, if it could be possible, for the meeting to say at an early date that that was approved. We recognise that it would not be right, after what has been said, to ask for that to-day; but we think there should not be the waste of a year. In another year the propositions which are put before the meeting will be equally open to criticism and will, perhaps, be equally criticised; and so it will go on from year to year, and we shall never be satisfied. I propose that the Report be deferred until the November meeting, and if this is agreeable the Secretary could make a note of it, and the November meeting could be made a special one for arguing this out. I do not know that we could spend two or three hours in a better way in November than in trying to come to a conclusion on this. If that were carried, it would give opportunity to the branches to express their opinions, which could be brought before the Committee. The Committee would then, no doubt, be able to hold a meeting of its own and report further on what they have learned. I propose that, if I am in order in so doing.

(The chair was here occupied for the remainder of the morning by Dr. Spence.)

Dr. CARLYLE JOHNSTONE.—There is an amendment before the meeting: That the Committee be cordially thanked for their labours and be re-appointed for one year, and that in that interval the subject be referred to the Divisions for their consideration and report.

The CHAIRMAN.—I will now put that.

Dr. YELLOWLEES.—We have not the slightest desire to rush this matter; it would be wrong. The Committee have no wish to thrust it on the Association, and we entirely agree with the amendment of Dr. Carlyle Johnstone that it should be sent down to the Divisions and be criticised by them. It is too important to be rushed. All we ask for to-day is approval generally of the scheme and the way in which it has been worked out, not committing you to any detail, so that with your approval we can continue our negotiations with bodies with whom we are in communication now. If it be the wish of the meeting to adjourn the special business of the tables till the November meeting, it would be a great gain, and very much better than laying it by for a whole year. If we could get this through in November, it would be possible then to do some of the tables, or all of them if you like, for this present year. (No, no.) The Committee disclaim all desire to rush this matter in any way, and they will be content with any decision.

The CHAIRMAN.—The motion retains the Committee for another twelve months.

Dr. YELLOWLEES.—We are willing it should be deferred and considered, only we want to know that the principle is generally approved.

The CHAIRMAN.—I understand that the matter is to be referred to the November meeting.

Dr. HAYES NEWINGTON.—Dr. Carlyle Johnstone evidently thinks that our recommendation, that the Committee shall be re-appointed for a year, is for the purpose of keeping the matter open for that time. It is to be re-appointed for another year for specific purposes—to present a table of heredity, to suggest forms to facilitate compilation, and generally to arrange for carrying out the works of the Association in this matter. That is the object of our recommendation. I think the amendment would read very well if it were passed, because it would permit that we would report in November; that amendment does not delay the matter for a year. May we have the terms of his amendment in writing?

The CHAIRMAN.—Will you put it into writing, Dr. Johnstone? Whatever is done it is felt that the sincere gratitude of the Association is due to the Committee in the matter, as they have done excellently.

Dr. CARLYLE JOHNSTONE.—If my seconder will agree to the alteration, I shall be glad to substitute a modified amendment, to this effect: "That the consideration of this question be adjourned until the November meeting of the Association, when proper facilities shall be given for its discussion; that that meeting shall be devoted principally to the subject-matter, and that it first come before the Divisions."

The CHAIRMAN.—I take it there will be time to do that.

Dr. YELLOWLEES.—I agree with that.

Dr. CARLYLE JOHNSTONE.—If my seconder agrees.

The CHAIRMAN.—I should like to hear a list of the meetings.

Dr. ROBERT JONES.—The Irish Division has sent in November 24th as their day, but our meeting is on the 17th, though Dr. Nolan informs me that there will be no difficulty in changing it.

Dr. YELLOWLEES.—I accept that. May we ask that the decisions of the opinions of the Divisions be sent to the Committee, so that we may have a Committee meeting before the general meeting?

The CHAIRMAN.—Yes.

Dr. MACDONALD.—I would point out a difficulty. I think steps should be taken as soon as possible after this meeting to give notice to every member of the Association that this question will be considered at the Divisional meetings, because the majority of members will not know anything about this until they have seen it in the JOURNAL. Notice should be sent to every member of the Association that this question will be considered in the Autumn.

Dr. ROBERT JONES.—I think this should come as a resolution from this meeting, and that it should go out to members from the annual meeting. It is a big question.

The CHAIRMAN.—Will you take instructions from this meeting, Mr. Secretary, that a circular be sent out as soon as possible after this annual meeting.

Dr. URQUHART.—I am willing generally to approve of what the Committee has done. In detail I desire to ask various questions. I understand that Divisional meetings are now to be convened to discuss these tables, and that this annual meeting is to be adjourned to discuss them in the light of what the Divisions may say, in November, and that the Committee will afterwards be empowered to proceed with their final Report for the annual meeting of next year.

Dr. HAYES NEWINGTON.—No, that was not my proposal. It was that the November meeting should have power to adopt these tables, and that there should not necessarily be a Report again to an annual meeting; but that this annual meeting—being adjourned till the time of the ordinary meeting in November—should finally deal with the Report.

Dr. URQUHART.—I find difficulty in voting for that, because we—a small number of members—are taking it upon ourselves to-day to finish this work in November without having the opinion of the great majority of the Association.

The CHAIRMAN.—The fact of sending out the circular gives men the opportunity of expressing their opinion.

Dr. CARLYLE JOHNSTONE.—I do not think we can govern the finding of the November meeting; we are not dealing with an alteration of articles or bye-laws: it is this debate which is being adjourned. The November meeting may decide to reject or to adopt the whole thing, but I am willing that the opportunity should be given them.

Dr. HAYES NEWINGTON.—Surely it cannot be wrong for this Association in

annual meeting to refer a decision on a particular point to the Association in general meeting! It is not as if it were referring it to another body.

Dr. MERCIER.—It may be much more convenient as a matter of procedure to adjourn this annual meeting until November. For instance, it may happen, when we come to deal with this again, that a circular may have to be printed; we may instruct that new tables shall be drawn up, and something have to be done involving an expenditure of the funds of the Association beyond £25, which can only be done at an annual meeting; and we can safeguard ourselves if we resolve to adjourn this annual meeting, rather than to make it an ordinary general meeting.

Dr. URQUHART.—Perhaps Dr. Carlyle Johnstone will say if he is in favour of adjourning this meeting.

Dr. CARLYLE JOHNSTONE.—I do not object in the least.

Dr. YELLOWLEES.—We have done it before.

The CHAIRMAN.—I am sure it is the right way.

Dr. YELLOWLEES.—The annual meeting is not committed to any opinion about it; it can do just as it likes.

Dr. CARLYLE JOHNSTONE.—My point is that the question shall be brought up and considered by the Divisions before that meeting, and that one member of the Committee should attend each of the Divisional meetings for the purpose of giving us information. We shall be much indebted if they will arrange it.

Dr. YELLOWLEES.—I am sure the members of the Committee will, as far as possible, try to carry that out. I think it most desirable.

Dr. CARLYLE JOHNSTONE.—My amendment is rather loosely worded. It is: "That the Report be received, and the Committee be cordially thanked for their labours; that the Committee be re-appointed; and that the transaction of the private business of this meeting be adjourned till November 17th; and that the Report be considered at the next meeting of the Divisions, and that the Divisions be requested to report in writing their views to the Statistical Committee." I do not say anything about the adjournment of the annual meeting.

Dr. URQUHART.—I desire to add that this meeting do stand adjourned till November.

A MEMBER.—We cannot have the President's Address this afternoon, if you adjourn the meeting to November.

Dr. MERCIER.—Yes, you can.

Dr. HAYES NEWINGTON read the rule governing the procedure in such a case (Rule 94), and asked if the adjournment was to be *in toto*, or only in regard to this particular business.

Dr. CARLYLE JOHNSTONE.—This particular business.

Dr. HAYES NEWINGTON.—At an annual meeting adjourned for this purpose?

The CHAIRMAN.—At the end of the meeting to-morrow it will be an instruction to the Chairman to say that this meeting is now adjourned, for the purpose of considering the Statistical Committee's Report, till November. I am told by the Secretary that it is possible to do this. (Hear, hear.) I will so arrange.

DATES OF MEETINGS.

Dr. ROBERT JONES.—These are all fixed, except the Irish meeting, in November.

Dr. ROBERT JONES.—The dates of the meetings are as follows: The Irish Division, November 4th, now suggested by Dr. Nolan; South-Eastern, October 6th; South-Western, October 28th; Northern and Midland, October 13th; Scottish, November 4th; our own General Meeting, November 17th. Meetings next year, 1905: Irish Division, May 9th; South-Eastern, April 27th; South-Western, April 11th; North Midland, May 4th; Scottish, March 10th; our own, February 23rd; and our own May Meeting, May 18th. Irish Division, further meeting, July 5th.

ELECTION OF ORDINARY MEMBERS.

The PRESIDENT nominated Dr. MacDonald and Dr. Bond as scrutineers.

The following candidates were elected ordinary members: Bodvel-Roberts, H. F., M.A. Cantab., M.R.C.S., L.R.C.P. Lond., Assistant Medical Officer County Asylum, Hatton, Warwick (proposed by Drs. A. Miller, A. W. Wilcox, and

Robert Jones); Vincent, George, M.B., B.Ch. Edin., Assistant Medical Superintendent St. Ann's Asylum, Trinidad, B.W.I. (proposed by Drs. George S. Seccombe, G. Stanley Elliott, and P. Campbell).

ELECTION OF HONORARY MEMBER.

Sir John Batty Tuke, M.D., M.P., was unanimously elected an honorary member of the Association.

ELECTION OF CORRESPONDING MEMBERS.

Dr. Koenig, Dalldorf Asylum, Berlin; Dr. Caroleu, Medical Superintendent of the Asylum of Santa Cruz, Spain; and Dr. Caetano Beirao, the President of the Psychiatry Section of the International Medical Congress to be held in Lisbon in 1906, were unanimously elected corresponding members of the Association.

The meeting then adjourned.

VOTE OF THANKS TO THE OFFICERS.

The PRESIDENT.—I have now the very felicitous duty of proposing a vote of thanks to the officers who have so ably helped me during the year of my office. During this year a great step has been taken in the evolution of the Association. This has been worked out to a very large extent by the permanent officers of the Association, for we have more or less permanent officers, officers who are re-elected annually. In addition we have other officers who come and go. To all these officers this Association is enormously indebted for the very large amount—the illimitable amount—of gratuitous work they undertake. So long as we have such good officers of our Association, and so long as they work so thoroughly well in the best interests of our Association, so long shall we flourish, and so long shall we fill that proper place which we should occupy in the economy of medicine. I propose to you, therefore, a vote of thanks to our officers, and I shall call upon Dr. Urquhart to respond thereto. (Applause.)

Dr. URQUHART.—I am sure it is the greatest honour anyone could have in our Association to serve as an officer of it. It has been a great source of gratification and enjoyment to us, however hard worked we may be, to meet with approbation and such kindly consideration at the hands of the members of this Association. I thank you very sincerely and very gratefully on behalf of the officers for the way in which you have carried this vote of thanks.

VOTE OF THANKS TO THE PRESIDENT.

Dr. WHITCOMBE.—A very pleasant duty devolves upon me. Our President, Dr. Ernest White, has not included himself among the officers of the Association, and I beg to move that the best thanks of this meeting be given to him (applause) for his very able and courteous conduct in the Chair. As an old President of the Association I realise the work that has devolved upon Dr. White during the last twelve months. He has presided at our meetings with an ability, a dignity and an impartiality which have done him great credit. I am sure that this vote of thanks will be accorded to him with acclamation. (Applause.)

Dr. OUTTERSON WOOD.—I have been asked to second this vote of thanks to our retiring President. I do so with very great pleasure, chiefly because I am an old friend of his, and knowing him as intimately as I do, it affords me the very greatest pleasure to bear testimony to what I consider the admirable manner in which he has performed his duties during the past year.

The vote was carried by acclamation.

The PRESIDENT.—Gentlemen,—I thank you very heartily for the very kind reception which you have given to the proposer and seconder of this vote of thanks to me. The next very pleasant duty which devolves upon me is to induct to the Chair Dr. Percy Smith, my successor. We welcome him to this Chair, and offer to him our hearty congratulations and our best wishes for a very successful year of office. I have now the further pleasure of adorning my successor with this badge.

Dr. Percy Smith then occupied the Presidential Chair, amid hearty applause.

The PRESIDENT (Dr. Percy Smith).—Mr. Ex-President and gentlemen,—I assure you I feel most deeply the honour the Association has done me in appointing me to succeed a long line of illustrious Presidents. I am not worthy to succeed them, but no effort will be wanting on my part to perform the duties of the President to the best of my ability. (Applause.) I believe that the President's first duty is to present the prizes. Unfortunately, to-day there is only one prize to be awarded, and that is the bronze medal of the Association. Of course we always hope that, in addition to the bronze medal and prize of ten guineas for the prize dissertation, there will be a candidate receiving the Gaskell prize, which is much more valuable. I think it is a matter of great regret that many more assistant medical officers do not go in for this admirable and valuable prize of the Association. The bronze medal is awarded on the following conditions:—To any assistant medical officer of any lunatic asylum, public or private, or any lunatic hospital in the United Kingdom, for the best dissertation on any clinical or pathological subject relating to insanity; and the prize has been awarded to Dr. Townsend, of Barnwood House, Gloucester, for a paper on "Experimental Investigations into the Toxic Relations of Melancholia, with especial reference to the presence of Indoxyl in the Urine." That has been considered by the three judges, the Ex-President, the President, and President-Elect, to be the paper most worthy of the prize. Dr. Townsend has not been able to come up to-day, therefore it will have to be forwarded to him.

The PRESIDENT then delivered his address (see page 607).

Dr. G. E. SHUTTLEWORTH read a paper entitled "The Educational Treatment of Young Epileptics" (see page 662).

At the close of the discussion on this paper it was agreed to transmit the following resolution to the Parliamentary Committee:

"That the Parliamentary Committee of the Medico-Psychological Association be requested to consider the desirability of making the Act of 1899, referring to the education of defective and epileptic children, compulsory on all educational authorities, and not merely adoptive, as at present."

Dr. C. HUBERT BOND read a paper entitled "A Plea for the Closer Study of the Body-weight and its relation to Mental Disease." This paper will be published in the next number of the JOURNAL.

SECOND DAY.

Dr. A. W. CAMPBELL contributed "Further Histological Studies in the Localisation of Cerebral Function" (illustrated by a series of lantern slides) (see page 651).

Dr. JOHN TURNER made a contribution, illustrated by lantern slides, on "The Finer Anatomy of the Nervous System, with special reference to the Doctrine of Continuity as opposed to the Neurone Doctrine." A report of this valuable contribution will appear in the next number of the JOURNAL.

Dr. W. H. STODDART read a paper entitled "The Psychology of Hallucination" (see page 633). This paper was accompanied by diagrams and stereoscopic slides.

Dr. J. CARSWELL read a paper entitled "The Occurring Pauper Lunacy of Glasgow Lunacy District, and the Provision for its Care and Treatment."

Dr. G. M. ROBERTSON read a paper entitled "Night in the Asylum."

At this stage of the proceedings the President vacated the Chair, and his place was taken by Dr. Hayes Newington.

Dr. J. MILSOM RHODES read a paper entitled "The Question of how to provide Accommodation in regard to Chronic and Incurable Cases of Mental Disorder."

The proceedings terminated by a vote of thanks to Dr. Hayes Newington for presiding during the President's absence from the Chair.

IRISH DIVISION.

SUMMER MEETING.

THE summer meeting of the division was held at the District Asylum, Armagh, by the kindness of Dr. Lawless, on Tuesday, July 5th.

Before the meeting the members were taken round the asylum, and were much impressed by the fine new hospital not long since added to the institution. Some cases were also demonstrated. The members were then entertained at luncheon by Dr. Lawless.

Dr. Lawless occupied the chair at the meeting, and there were also present Drs. M. J. Nolan, J. Moloney, R. R. Leeper, C. Norman, S. Graham, W. Graham, Dora Allman, J. Mills, and W. R. Dawson (Hon. Sec). Letters expressing regret at inability to attend were notified from the General Secretary, Dr. Oscar Woods, and Dr. Hetherington.

On the proposal of Dr. NORMAN, seconded by Dr. MOLONEY, the minutes of the previous meeting were taken as read and signed.

The SECRETARY pointed out that the date fixed for the Spring Meeting of 1905 would be very late, owing to the lateness of Easter, but it was decided not to change it.

PERIOD OF TRAINING FOR NURSES AND ATTENDANTS.

A communication on the above subject from the General Secretary having been read, it was unanimously resolved, after a short discussion, on the proposal of Dr. MILLS, seconded by Dr. NORMAN :—"That the period of training of nurses and attendants be prolonged from two to three years, provided that one of them may be taken in a general hospital."

COMMUNICATIONS.

1. The CHAIRMAN read some "Historical Notes on Armagh District Asylum."

This asylum is one of the oldest in Ireland, having been completed in December, 1824, though the first patients were not admitted until July, 1825, seventy-nine years ago. It was built at a time when the humane treatment of the insane was in its infancy; in fact, it is stated in one of the reports that the manager, a Mr. Jackson, was one of the first in Ireland to adopt what is understood as the humane treatment of the insane. At the time the asylum was built the idea which seemed to animate its designers was to make it as much on the lines of a prison as possible, and this idea is not unnatural, seeing that the lunatics who committed offences, or who were dangerous, were confined in the prisons before district asylums were built, and even afterwards, when the district asylums were full, lunatics in the prisons had to await the occurrence of vacancies before they were transferred to the asylum, so that it would seem to be not unnatural that asylums should be built on somewhat prison-like lines; evidence of this prison-like appearance is abundant in the old portion of the building in the shape of the vaulted ceilings of the single rooms and corridors of the ground floor, the small size and height of the windows, though these have since been enlarged, and the very strong doors made of thick timber supplemented with iron bars. These all suggested to the unfortunate inmate the idea of hopeless incarceration rather than that of relief, rest, and cure. There is a curious restriction as to the size of lunatic asylums in that they were to be built for not less than 100 nor for more than 150 patients. Some idea as to the comparatively small number of insane at this time may be gathered from the fact that this asylum, built to accommodate 104, was intended to be sufficient provision for a very large district comprising no less than five counties, viz. Armagh, Monaghan, Tyrone, Fermanagh, and Donegal. In 1829 the asylum at Derry was finished, and six patients belonging to the counties of Tyrone and Donegal were transferred there. After this, in 1853, the asylum at Omagh was built, which took the county Fermanagh from this district, thus relieving the congestion that was very much felt. At this time the county Cavan was added to the

district, so that from 1853 until 1869 this asylum district consisted of Armagh, Monaghan, and Cavan, in which latter year the Monaghan Asylum was completed, and the patients who were here belonging to these counties of Monaghan and Cavan were transferred to the new asylum, leaving 142 patients in the asylum who belonged to the county Armagh. I should have mentioned earlier that when this asylum was built to accommodate 104 patients the proportion for each county was, Armagh 20, Monaghan 18, Tyrone 27, Fermanagh 13, and Donegal 26. These figures sound somewhat absurd when we think of the numbers of the insane that are now accommodated from these counties. The accommodation of this asylum remained at 104 until the year 1864, when certain additions were made in consequence of considerable increase in numbers, which numbers had been steadily increasing, and many patients had to remain in the jails because there were no vacancies in the asylum, and it could not be further overcrowded. These additions raised the accommodation to 162, at which figure it remained until 1880, when further additions were made, which were completed in 1885, by which the accommodation was raised to 304. In the year 1890 the asylum was again greatly overcrowded, and the question of providing further accommodation had again to be considered; it was then decided not to make any more additions to the existing building, but to build a completely detached hospital on the most modern lines to accommodate from 60 to 70 patients. It was soon found, however, that this number would not be sufficient, so it was eventually decided to build for 150 or 160 patients. This building was completed and occupied in 1898; our accommodation was thus raised to 434, but when I mention that there are now over 500 patients in the asylum, and that the daily average number resident for last year was 511, it will be seen that history is again repeating itself, and that eventually, and at no very distant date, further building will be necessary in order to accommodate the ever-increasing number of lunatics. In this connection it may be of interest to give some statistics relating to the growth of the numbers of the insane in this asylum and this county. Starting from the year 1870, in which year the district consisted of the county Armagh alone, there were in the asylum on the 31st December 142 inmates. The population in 1871 being 179,620, the ratio of insane to general population being 79·21 per 100,000. At the next census, in 1881, the population had decreased by 11,083, and was 168,177, while the number resident on the previous 31st December was 196. During the next decade the population had further decreased by 24,888, and stood at the reduced figure of 143,289, while the number resident in the asylum on the previous 31st December had increased to 326, a ratio of 227·51 per 100,000. At the last census, in 1901, the population was reduced to 123,392, being 19,897 less than 1891, the number of patients resident on the previous 31st December having risen to 496, representing a ratio of 380·08 of insane per 100,000 of general population. In order to bring the figures down to 1903, I have taken the population as given for 1901, and the proportionate decrease based on the decrease of thirty years, and find that the estimated population in 1903 was 117,806. The average number resident in the asylum for that year was, as I have said, 511, which gives a ratio of 433·76 per 100,000. These figures are, of course, only approximate, but nevertheless they show beyond question that there is a diminishing population and a largely increasing number of insane in one comparatively small county, though not by any means confined to it, for unfortunately it is the same sad story all over Ireland. From these figures we see that in a little more than one generation the population has decreased by 61,455, while the numbers of insane resident in the asylum have increased from 142 to 511. What the figures will be at the end of another generation it is not easy to prophesy, but it is fairly certain that the number of lunatics will not markedly diminish, and that the population will materially increase is not very probable, so that the housing and treatment of the insane will become in the future, what people are beginning to feel it at present, a very difficult and acute social problem.

From time to time structural improvements have been made in this asylum. The windows have been, as already mentioned, enlarged, though they are not as large as in more modern buildings, several single rooms have been converted into dormitories, but lately this has been done on a large scale in one of the corridors which contained twelve single rooms. Nine of these were taken away, and the space thus obtained with the added space of the corridor has given a very fine dormitory

capable of containing twenty-six beds. This asylum is still badly off for dayroom accommodation, there being only dayroom space for 310. The committee contemplate the gutting out of a portion of two of the older corridors, and converting the space thus obtained into a dayroom on the ground floor and a dormitory above. It is always or nearly always unsatisfactory to tinker at an old building, for when additional accommodation is provided the other administrative departments—dining-room, kitchen, laundry, scullery, baths, and lavatories—are frequently found inadequate to the increased demand on them, and entail difficulties in efficient administration.

At the time the asylum was opened it was placed in charge of a lay manager who, with his wife as matron, continued in office until 1859, when Dr. McKinstrey was appointed; he was succeeded by Dr. W. Graham in 1886, who held office until August, 1897, at which time I was appointed superintendent.

Dr. MOLONEY asked whether the asylum land had been extended, and whether the patients came mostly from the agricultural class.

Dr. LAWLESS replied in the affirmative to both questions.

Dr. CONOLLY NORMAN said that the model at first followed in asylum construction was, as a general rule, that of the monastery, owing to the fact that Bethlem had originally been an establishment of that kind. Later a worse one was adopted, that of a barrack, which came to be regarded as the typical plan for asylums. Happily we had specimens of a more advanced style in the hospital attached to Armagh Asylum, and in the Belfast Asylum at Purdysburn. He thought, however, that the difficulty of providing for the insane would have to be met by the adoption of the system of family care, in order to relieve the asylums, as the numbers of the insane were increasing in Ireland, whereas population and wealth were diminishing.

Dr. MILLS said that he had been struck by the enormous increase in the numbers of senile demented, idiots, and epileptics in the period covered by Dr. Lawless' figures. He thought that this was due to the absolute intolerance in the domestic circle of the slightest mental affliction. The village idiot was no longer seen, nor the senile demented; they were now sent to asylums; and the real increase consisted, not of acute cases, which were fewer than ten years ago, but of cases of the class which could be treated on the system mentioned by Dr. Norman, *i. e.* the relatives should be paid a small subsidy for keeping them at home.

Dr. LAWLESS, in replying, said that their first admissions had definitely increased year by year, and that their largest class consisted of adolescent cases.

2. Dr. W. GRAHAM brought forward a communication entitled "Science and a Future Life." This paper will appear in the next number of the JOURNAL.

A unanimous vote of thanks was passed to Dr. Lawless for his kind hospitality, and he having responded, the proceedings terminated.

BRITISH MEDICAL ASSOCIATION.

SECTION OF PSYCHOLOGICAL MEDICINE.—ANNUAL MEETING, OXFORD, 1904.

Reported by R. L. LANGDON DOWN, M.B.

President.—Charles Arthur Mercier, M.B. Lond.

Vice-Presidents.—Ernest W. White, M.B.; James Neil, M.D.; T. Seymour Tuke, M.B.

Hon. Secretaries.—W. Ford Robertson, M.D.; R. L. Langdon Down, M.B.

The section was very well attended, and the papers read were fully discussed.

CRIMINAL RESPONSIBILITY AND DEGENERACY.

The proceedings opened with a discussion of this subject, which was introduced by the President of the section. In prefacing his remarks Dr. Mercier referred to the long-standing difference in this matter between the legal and medical professions, and claimed that if each side would endeavour to understand the attitude of the other there was no essential antagonism, and the time was ripe

for a complete reconciliation between them. In support of his thesis he put forward the following propositions :

The view that the chief aim in dealing with criminals is to protect the community, and the view that regard should be paid to the individual peculiarities of the offender, are not antagonistic, but complementary.

Superior to both is the aim of cultivating and increasing the sense of responsibility in all citizens.

This aim is prevented by the doctrine that criminals form a "natural kind," distinct from other men. That doctrine is unproved, and its consequences are pernicious, both to the criminal himself and to the community.

The problems to be solved are,—Who ought to be punished? and With how much punishment?

The answer to the first question is—Wrong-doers; by which is meant those who, for their own gratification, and without justifying provocation, wilfully do harm to others. This definition excludes from wrongness certain cases of harming, whether wrought by the sane or the insane, and applies the same criterion of responsibility to both. So that :

1. Insanity in the wrong-doer does not of itself necessarily exonerate him from punishment.

2. Insanity may exonerate him, wholly or partially, but only by bringing the harm that he has done within the exonerating provisions of the definition of wrong-doing; that is to say, it must be shown, in accordance with the answers given by the judges in 1843, that the *animus nocendi* or *sclerandi* was wanting. Consequently, the injurer should not be punished if :

(a) The harm was done with no intention of obtaining gratification for the harmer.

(b) The harm was done to prevent injury threatened, and was not more than was justified by the threat.

(c) The act was not wilful. A wilful act means an act done with knowledge of the act and of its obvious consequences, and with intention to do the act and bring about these consequences. With respect to knowledge the judges' answers may be accepted as a guide, with one proviso. With respect to Will—if the true Will of the man himself did prompt the act, he is guilty and punishable; if not, he is not.

When the citadel of personality is itself invaded; when not merely Will but Desire itself is morbid, the case becomes extremely difficult, and is arguable both ways. The suggestion of the address is that in such cases a mitigated punishment most nearly satisfies justice.

HEREDITY.

This subject was discussed both from the point of view of modern embryological and biological research, and also from the aspect which it presents more directly to those concerned with the study of insanity and its origins.

Biological aspect.—On its biological side the discussion was opened by Dr. J. Beard, Lecturer in Embryology in the University of Edinburgh, who illustrated his researches by lantern slides, and presented the following conclusions :

The phenomena of heredity and genetic variation appertain to the germ-cells, that is to say, they are germinal in nature. All ancestry passing through a continuous line of germ-cells, and never through the cells of the individual (somatic cells) containing the germ-cells, in the sense of a handing-on of anything there is no such thing as heredity. The individual is merely a lateral and terminal offshoot. As a recent writer, A. Robinson, has well said, "the germ-cells are the Alpha and Omega : they pass from a beginning, of which we have no knowledge, to an end, which we cannot conceive." Since other existing theories either assume an intangible germ-plasm, or make the line of descent pass through the individuals, with the exception of Galton's "stirp" they have no sort of identity with the "under-study theory of heredity" set up by the writer as one result of the discovery of a morphological continuity of germ-cells. In the higher animals direct development, epigenesis, and a somatic origin of germ-cells do not exist. The recapitulation theory, according to which every animal in the course of its development "climbs its own genealogical tree," is merely an illusion of the imagination and without any basis in fact. The mode of the development is not "egg-

embryo egg-embryo, etc.," but in a mammal or a man it is "egg (zygote)—a sexual generation (chorion)—primary germ-cells—secondary germ-cells (oogonia, etc.)—oocytes, etc.—gametes (eggs and sperms)," "the embryo" arising by the unfolding of one primary germ-cell. The formation of an embryo is a mere incident in a certain chain of events. The phenomena, to which the term heredity is applied, have their basis in certain facts of embryology. Given in any life-history the period of the formation of the primary germ-cells, and for simplicity let there be of these but two, AB and BA. On one will fall the lot of developing into an embryo, while the other will furnish the sexual products of this. The two cells are in all respects similar or equivalent, so much so that if both form embryos these are identical twins. In the ancestry neither cell had ever been a higher animal, neither they nor their ancestors had ever formed parts, that is to say, been somatic cells, of an animal body. But this ancestry is continuous with a long line of germ-cells, and at regular intervals these were exactly like certain sister-cells, which did develop and form individuals. Although one of the two, AB, does not itself give rise to an embryo, in the meantime it retains for itself and for all its immediate progeny the properties of BA, those characters which, were it or any of its progeny to develop, would make it or them identical twins with BA, the other cell, which did develop. But the foregoing takes no account of two things, that the conjugation of two germ-cells at fertilisation is the joining together, loose and without blending, of two complete sets of potential characters, of two individualities, and that as living entities the germ-cells like all living things must be influenced by and react to their total environment. This introduces the important factor of genetic variation.

As Wallace has said, the foundation of the Darwinian theory is the variability of species. It does not attempt to explain the cause of variation, but starts from the fact of its existence. Under this theory resulting from the struggle for existence there is a survival of the fittest. The only adequate cause of genetic variation yet suggested is Weismann's germinal selection. This is purely a mental concept; in its nature it is very complicated, and being quite without connection with any known phenomenon or epoch of the development, it hangs entirely in the air. As defined by Weismann, the process would furnish a very great variety of gametes or conjugating cells, and these would be so varied in their characters or qualities, that the resemblances rather than the differences among the progeny would require explanation. The problem of the true cause of variation belongs to embryology. For various reasons each and every egg or sperm must be regarded as containing *one* complete set of all the characters or qualities necessary to form an individual of the species. At fertilisation two sets of these are somewhat loosely joined together. In the developing embryo only one complete set of characters is made use of, and, while the other corresponding qualities remain more or less dormant in its cells, that set or pack actually employed may be made up of any characters taken from either of the two packs, but so as to make up one complete pack. Turning then to the germ-cells, each of these possesses the duplicated set, and later on at the so-called "reduction," *i.e.*, at the final division of the oogonia into oocytes, and of the spermatogonia into spermatocytes, prior to the formation of conjugating cells or gametes, the twofold set becomes diminished to one pack only by the elimination of one complete pack. The true meaning of the reduction of chromosomes is the elimination of one set of characters or qualities, such that if among those of the original sets there be any unsuitable ones these are rejected. The union of two sets of characters at conjugation is in animals retained by the germ-cells, until the period of the reduction, by the embryonic cell, until the commencement of its development, when it becomes latent, and in plants during the whole life-period of the flowering plant (*sporophyte*). The two sets cannot be identical at the start. As living organisms they must be influenced by the total environment, nutrition, climate, disease, toxins, etc. To all these influences they will react. The effect of all the factors will be a different one on the differently constituted characters. Some it will favour, and these will flourish and increase in import. Others will be unfavourably influenced or neglected, and these will diminish. At the reduction there will be a settling-up, and if the environment have not been a constant one, some of the characters will have become better than other corresponding ones, a new pack will be chosen, and the less favourable characters will be rejected. This elimination of characters

may on occasion become an elimination of complete individualities, or what is the same thing as a casting out of "ancestors." Moreover, because the two sets have been conjoined under the influences of the environment, and have reacted to this, the process becomes a self-adjusting mechanism, the up and down oscillations of the characters of the two sets endeavouring to follow and compensate the changes in the environment, and the result must be variation. This process may be defined as germinal election and elimination in adaptation to the environment.

The Darwinian theory is undoubtedly largely based upon the analogy of artificial selection. Nature is supposed by natural selection, resulting from the struggle for existence, to eliminate all the unsuitable individuals, and thereby to select those for the continuance of the race, which are most or more suitable for the environment. Even if she did this its results would be as nothing compared with those of germinal election of fit with elimination of unsuitable characters, which at its basis is also a weeding-out of unsuitable individualities. A selection of individuals can give no certain result for either natural or artificial selection. Nature goes to the root of the matter, she makes no selection of individuals, for about these she cares nothing. She can exert her choice and she does it, among the germ-cells, and not merely in these, but among the characters or qualities the germ-cells possess. In this it would be futile to attempt to bind her down by cast-iron laws of inheritance, to dictate that "the average contribution" of a father should be so much, of a grandfather so much, and so on. This may hold good in cases, but only with a constant environment. When the latter obtain, if all the characters or qualities be equally good, then, as in the Mendelian experiments in intercrossing peas, the election and elimination may be left to the mathematical laws of probability; they may be taken apparently at random, and in this way it may become possible to speak of sexual reproduction as sometimes an "amphimixis" or mingling of characters, and to set up laws of inheritance by average contribution. With a constant environment or with what is assumed to be such, man first rejects (individuals of) certain varieties, and in this way favours (individuals of) some particular variety. By closely intercrossing these he accentuates particular points, because of course even in the characters of germ-cells suited to a particular environment there may be degrees. In this man takes a course the reverse of that adopted by Nature. Her method may be slower, but it is sure. When she causes variation, she initiates it by altering the environment. While some one or more varieties of a species may be able to adapt themselves to the new conditions, others will fail in this, and these will be eliminated either as individuals, or even if fertile with the favourable variety or varieties then by germinal elimination. Germinal election and elimination appear to offer adequate and simple explanations of all the phenomena, at any rate the author has encountered no real difficulties. They throw light upon the Mendelian cases of intercrossing peas, etc., on mimicry, protective coloration, bud-variation, and the loss of organs, such as the hind limb of the Greenland whale, for which latter cases Weismann found it necessary to call in a new principle, that of "panmixie" or the cessation of natural selection. They explain why the giraffe, for example, has a long neck; this is not because, as the Lamarckians assert, it was in the habit of stretching its neck, the effects of this being handed on by the inheritance of acquired characters; and again, not because, as the Darwinians maintain, by natural selection Nature picked out those individuals whose necks tended to be long, and destroyed those with shorter necks; but simply because Nature eliminated in the germ-cells those characters, which tended to the production of a short neck, while she fostered those other characters of the other parental line, which tended to the formation of a longer neck, and she increased the value of these characters from generation to generation. The principle resulting in the self-regulating mechanism offers a simple construction of all the phenomena of variation, an ultimate and a far more natural one than "natural selection" or the "germinal selection" of Weismann. Indeed, under it there is no necessity to invoke these: by germinal election and elimination their positions are completely and decisively outflanked and rendered untenable.

Under the views here advanced the words "parent," "ancestor," "offspring" and "reversion" become meaningless. In the same way an "appeal to ancestry" (Weldon) is barred by the absence of any "ancestors" to appeal to. In the union of egg and sperm we witness the joining together of *but two* sets of characters and

not that of "x" sets, derived from as many "ancestors." In the development of the individual for any given character only *one* of the two becomes manifest, but the other may reappear in the gametes. As in the reproduction of dioecious individuals these unite with the gametes of other individuals, in this union *a priori* there would be for any particular character *four* possibilities. To illustrate this, take the four grandparents, and consider only one character in the gamete of each. Assume, further, that in the two following generations there be no complete elimination of any character and that this reappear in some of the gametes. The characters may be called A, b, C, d, the first two being conjoined in the germ-cells of the father, the second two in those of the mother, and the large letters being dominant or prepotent. In the gametes of the parents the representative of this character may be either the dominant one or the latent one. That is to say, any particular gamete may contain any one of the four characters, A, b, C, d, and suppose then that b and C be conjoined to form the grandchild and that C be dominant in it, its gametes will then contain either character b or character C. Therefore, if this character b unite with another e, and if in the development b be the dominant one, the result will give the appearance of a "reversion" to the grandparent b, after a dormancy through two generations. But there is no room for more "ancestors." Similarly, the latency may extend over more generations, but always in such a way, that prior to the actual ripening of the egg and sperm, destined ultimately to produce as one product a particular embryo, only four characters come in question. Much attention is being devoted to the statistical study of variation in the hope of increasing our knowledge of heredity. Such investigations to be of value should include all the essential factors. But in none of the published investigations is due heed given to the influence of the environment. For the modern biometrician the environment, as a factor might be non-existent! He attaches as little weight to its influence as he does to the importance of making any distinction between somatic and genetic variations. In his published researches he ignores the influence of the environment and slumps somatic and genetic variations together! Environment is all-powerful for the individual and for the germ-cells too! A constant environment induces no change, and thus permits of the operation of the mathematical laws of probability in the selection and elimination of characters. A bad environment, leading to the mating of the unfit with the unfit, and in this way to the selection of the unsuitable, not among the individuals but among the characters or qualities of the germ-cells, can but result in deterioration and physical and moral degeneration. Finally, a good and favourable environment, with an approach at complete adaptation to it on the parts of the individuals and of the germ-cells, must be the prime cause of advance, and with this of the ever greater and greater improvement of the stock.

A fuller statement of this theory, together with illustrations of many of the slides exhibited, will be found in the *Review of Neurology and Psychiatry*, vol. ii, 1904.

PSYCHIATRICAL ASPECT.

Dr. W. König (Daldorf Asylum, Berlin) dealt with this side of the subject in the following paper:

Certain types of mental disturbance are, or may be, acquired. These will be considered with regard to Dr. Beard's teaching and in the light of the author's own experience.

Three principal groups of heredity may be distinguished with respect to the purpose which is in question: (1) homologous heredity, (2) dissimilar heredity, (3) "mixed" heredity.

The main questions to be discussed are:

1. Is there any clinical evidence of acquired mental abnormalities being transmitted to the offspring?

2. To what extent in insanity does environment influence the germ cells, and under what circumstances does it affect the soma?

Adult general paralysis is an acquired disorder which is not propagated to posterity, but in all individuals of neuropathic heredity the parental germ cells may be adversely affected. In certain families there is an uncommonly high degree of predisposition towards parasyphilitic sequelæ. A leading rôle must be imparted to environmental agency in chronic alcoholism.

Among chronic alcoholics there is a large percentage who show homologous heredity, a rather low percentage of hereditarily untainted individuals, and an intermediate proportion of dissimilar heredity.

Amongst the adult descendants of alcoholics are numerous habitual drunkards, many instances of essential paranoia, dementia præcox, and imbecility. There is a very close relation between alcoholism and epilepsy.

The majority of chronic inebriates have a neurotic history. While there is no transmission of the habit, or even of the craving for drink, clinical evidence favours the view that the germ cells are so modified as to render the offspring particularly liable to the injurious influence of intoxicants.

Idiopathic epilepsy is that type of mental disorder which discloses the disastrous consequences of heredity perhaps more distinctly than any other nervous condition. It may be assumed that in essential epilepsy the germ cells are so seriously altered that the inherited disposition is duly developed. Disorders due to arteriosclerotic changes frequently show hereditary disposition towards atheromatous degeneration.

The different types of functional psychoses show a more or less powerful hereditary disposition to insanity and other nervous disorders. Hereditary modification of the germ cells in one respect is apparently of a twofold nature. Sometimes, as in a case of essential paranoia, the morbid character of the germ cell develops at some time of life in spite of the most favourable surrounding factors; while in other cases environmental factors are necessary to awaken a dormant disposition.

There is no clinical evidence of acquired mental abnormalities being transmitted to the offspring. It is highly probable that the influences of the environment are reflected on the germ cells. The hereditary potentialities of the germ cells may in some cases develop in early or later life unaided by any traceable environmental influences; in other cases they certainly remain dormant or in a rudimentary state of development until roused to life by inimical extrinsic factors.

DEMENTIA PRÆCOX.

A discussion on this subject was initiated by Dr. Conolly Norman (Richmond District Asylum, Dublin). He said:

The existence as a distinct entity of a condition which can be well called by this name is disputed. The collective grouping of Hebephrenia, Katatonia, and Paranoid Forms make so vast a congeries that it is impossible to perceive any connecting link between the items of the mass, save in their origin at the age of adolescence and in their supposed unfavourable termination. So much is endeavoured to be put within one loose definition, that the continent bursts and the contents escape from our grasp. With regard to origin at the adolescent period, the peculiarities of cases which begin at this epoch are largely the psychological characteristics of a particular period of mental growth, exaggerated and distorted by disease, and are therefore not to be regarded as indications of a specific affection. Disease attacking an undeveloped organ has a natural tendency to interfere with its further development. This we see in every tissue from dental to cerebral. Hence it may often be that cases commencing at the period between puberty and adolescence and not recovering, retain the peculiar type of adolescent mind. It is scarcely allowable to include incurability in our definition unless we can point to definite destructive changes in the nervous tissue as the cause of the disease. For so far, these are purely hypothetical.

Dr. Clouston's definition "insanity is a tendency to dementia" may be recalled, and it may be admitted that adolescent cases not recovering have a special liability to run into dementia. Into the classification of which Dementia Præcox forms so large a feature, secondary dementia is not admitted, while we are taught to believe that dementia is from the beginning the note of the three types Hebephrenia, Katatonia, and the Paranoid Forms. An elaborate description is given of the flightiness, the oddities, the deficient attention, the incapacity for mental exertion, the unformed or unused judgment, and we are told that this is dementia, but it is submitted that of the adolescent types of insanity, so far as they are distinct, dementia in any sense in which the word was ever used before, is not the essential characteristic. To see this it is only necessary to compare the so-called dementia with the break up of the elementary thinking processes which occurs in general paresis or in dotage. In the latter two conditions the changes may be

likened to the paralysis which in one always, and in the other generally, accompanies them, but in "precocious dementia" this is rather an ataxy of the mind, There is inco-ordination, not paralysis. Therefore dementia is a very faulty term to use here. The qualifying adjective "precocious" is also to be deprecated. To call anything precocious merely because it occurs in early life is a perversion of terms, for "precocious" implies too early arrival at an inevitable end. Neither are these mere verbal quibbles, for the epithets beg the question. It is admitted, however, that Dementia Præcox is not absolutely incurable, and we are even advised, as Wernicke has pointed out, to treat cases early so as to give them the best chance of recovery. It is then wrong to dub them by a name which encourages despair.

Dr. DAVID ORR and Dr. W. G. ROWS showed, with the aid of a lantern, a series of microscopical preparations to illustrate the course of "*degenerative lesions of the posterior columns of the cord in general paralytics*," and particularly to show the "*point of origin of tabes dorsalis*." By complementary methods of staining, and the selection of very early cases of the disease it was possible to show that the point of special vulnerability to the disease corresponded with the point where suddenly, just before their entry into the spinal cord, the posterior root-fibres lose their protective sheath. It was suggested that the disease was due to a special liability to toxic action which acted first at the most vulnerable point. The research was not yet complete, but as far as it went the evidence was very convincing.

Dr. A. T. SCHOFIELD read a paper on the "Cure of Quackery," the essential point of which was that for the most part the quack utilised the powers which the mind exerts in an obscure way over the bodily functions in the cure of disease. His plea was that these natural powers should be studied, their laws investigated, their uses and actions incorporated in the science of medicine, taught in the schools and practised in the consulting-room, and thus the ground would be cut from under the feet of the quack.

Dr. PASMORE read a paper on "How to make a Family History." He pointed out that the collection of the facts as to the mental and other conditions in antecedent and collateral relatives was a complex matter, and one very difficult to carry out completely and rapidly unless some definite and simple scheme is adopted. He passed round a diagram of the scheme he had adopted in his own practice which enabled him to secure full data for three generations back in any case with ease and completeness. Further back than this the information obtained would not be worth securing. The general adoption of some such scheme would secure a desirable uniformity, and the President said he would bring the matter before the Statistical Committee of the Medico-Psychological Association.

THE HORTON ASYLUM SCANDAL.

At the Surrey Assizes, held at Guildford yesterday, before Mr. Justice Darling, Thomas Wiles, twenty-three, carman, Maurice Clark, thirty-three, butcher, Charles Edward Morant, clerk, and Alexander James Ross, twenty-seven, clerk, were again brought up on indictments connected with the Horton Asylum scandal. The prisoners were indicted for conspiring together to steal a quantity of groceries and other goods, the property of the Asylums Committee of the London County Council, at Horton Asylum, near Epsom, between April 4th, 1903, and March 16th, 1904. They were also indicted for specific cases of theft. Altogether there were seventy-one counts in the indictment.

Mr. H. F. Dickens, K.C., Mr. George Elliott, and Mr. Cecil Whiteley prosecuted for the London County Council; Mr. Huntley Jenkins and Mr. Curtis Bennett represented Clark; Mr. Bridgwater appeared for Morant; Mr. H. Brandon for Wiles and Ross. A watching brief on behalf of a firm of contractors was held by Mr. Heber Hart.

At the outset there was an argument as to whether the statement made by Morant at the police-court should be put in, after which—

The Judge said he should tell the jury that this was evidence against Morant to

prove Morant guilty of conspiracy. It would be for the jury to say with whom Morant had conspired.

Morant's statement was read. He said that a system of book-keeping at the asylum was largely responsible for the present state of affairs. Not one of the asylum's sets of store books would stand the test to which those books had been subjected by the firm of accountants. The books had been badly kept before he went to the asylum, and he had to make many alterations in order to get them right. They never liked to have a lot of over-stock, and it was usual to get rid of the over-stock. He had seen barrels of limejuice and vinegar poured down the drains, and that was considered nothing. Seeing such a waste, he thought there was no harm in taking some of the things for himself. He had seen a ton of granulated sugar melted down in that way. Morant also alleged that some officers of the asylum had been in receipt of sums of money from contractors.

Evidence having been given as to the manipulation of the books, the case for the prosecution was closed.

Counsel for the defence offered no evidence.

Mr. Dickens, K.C., in addressing the Court for the prosecution, said he had put in Morant's statement as evidence against Morant, but he did not ask the jury to believe the whole of it. He characterised Morant's statement as to sugar and fat having been poured down the drains as "absolute moonshine." The story was invented to cover his own misdeeds. With regard to the evidence of the witness Norris, he pointed out that it was corroborated in every detail with one exception.

Mr. Brandon, on behalf of Wiles, said Norris was undoubtedly a clever man, but he was going to ask the jury not to place absolute reliance on what Norris had said.

Mr. Jenkins submitted that there was no evidence of conspiracy. If any offences had been committed they had been committed by men acting independently. He was not the instrument of anybody, and it was shown that he moved goods to many places and to other asylums.

Mr. Bridgewater, for Morant, also contended that there was no conspiracy.

The judge, in summing up, told the jury that they must treat Norris's evidence carefully. With reference to the suggestion that his evidence was uncorroborated, there was corroboration on some points, because it had been proved that goods had been removed from the asylum. No explanation had been vouchsafed. He invited the jury to express an opinion with reference to the conduct of the asylum. It would assist him in passing sentence, and might also assist the County Council.

The jury found all the prisoners guilty of conspiracy. They recommended Wiles to mercy. They added that in their opinion the Horton Asylum had been grossly mismanaged, and that the conduct of those responsible for its administration ought to be seriously inquired into.

In passing sentence the judge said he thought the Horton Asylum was grossly mismanaged, and that enabled him to take a lenient view of the conduct of the prisoners. There was no proper control or supervision. The man in charge received only a salary of £200, rising to £250. The rest of the men, if they once became dishonest and could get one accomplice, could make away with the stores as they had done. Norris had stated that there were twenty-six people included in this malversation. It would not surprise him to know that this was so. There were already four persons in the dock, and they had heard that others had been discharged from employment. It might be that the whole management of the asylum was criminal from top to bottom. Mr. Justice Darling then sentenced Wiles to three months' imprisonment; Ross, who had been on bail, to eighteen months' imprisonment, without hard labour. The other two men, in consideration of their having been some time in prison, were sent to sixteen months' hard labour.—*Daily Graphic*, July 20th, 1904.

CORRESPONDENCE.

To the Editors of the 'Journal of Mental Science.'

GENTLEMEN,—Your courtesy in sending me a proof of Dr. Mercier's paper gives me the opportunity of saying that a classification of insanity was neither asked from nor attempted by the Committee on Statistical Tables. The grouping of the chief forms of mental disorders received into our asylums is in no sense such a classification. It might as well be said that a naturalist who arranges the contents of his trawl-net into groups of the various forms represented was making, or was bound to make, a classification of marine zoology. That the terms used are imperfect, unsatisfactory, and unscientific is universally acknowledged; they are used only for want of better terms, and better terminology can come only with fuller knowledge.

The classification of insanity should be based not on symptoms, which are variable, nor on causes, which are uncertain. It must be based, as in other diseases, on a knowledge of the essential pathological conditions, as confirmed or revealed by morbid anatomy. To such knowledge we have not yet attained, therefore our attempts at classification have been failures, and our nomenclature, which reflects our knowledge, remains indefinite and defective.

I wish I could congratulate my friend Dr. Mercier on having achieved the as yet impossible task. His paper is able and interesting, but the *degree of intensity* in the symptoms, a factor which varies so frequently and so greatly in nearly every case, cannot, I think, be accepted as a secure basis for classification.

Yours etc.,

D. YELLOWLEES, *Chairman of the Committee on Statistics.*

NURSING—MALE AND FEMALE. FROM DR. URQUHART.

It will be conceded readily that trained nursing is of great importance in asylum administration, at least on this side of the English Channel. The Medico-Psychological Association has devoted much time and care to the development of this service, and has proved the soundness of their general scheme, which is now familiar to all who take an interest in the welfare of the insane. Whatever changes have been made by the Educational Committee are calculated to improve the conditions of service and to promote the interests of the patients. These changes have been well discussed, and have been found appropriate in the experience which later years have conferred upon us. It is natural that this success should be pushed further by some than appears judicious to others. It is also a distinct benefit that ideas should be carried into experiments; that, in a healthy rivalry as regards our common interests, men should develop modern practice along lines that promise improvement in details. The principle, of course, must rest upon that "improvement in the treatment of the insane," which is in the forefront of our memorandum of association. While all will agree on the principle they may individually differ in regard to its application to daily duties. It is on this ground that I would deprecate the recent movement in favour of female nursing in male wards—if it be held by those who advocate the change that it is a system which ought to be universally adopted. Briefly, my point is that it is necessary for the adequate nursing of many patients that trained male nurses should be employed, and, if that be so, then training schools for male nurses should not be abolished.

No doubt this will appeal to a limited number of asylum physicians, for the service in the great county asylums is mainly arranged for these institutions only, in the hope that it will attract and retain the nursing staff; but in asylums dealing with private patients many nurses and attendants are led to engage in private practice or in private nursing homes. Indeed, as methods of asylums resemble the methods of general hospitals, so does experience in management. The staff nurses of general hospitals, like the charge nurses of asylums, have waited for promotion, and long retain the higher posts; so that the movement towards these posts has become slow and tedious. This naturally induces junior nurses to find better positions elsewhere. Thus there are many changes, and hospitals become more and more of training schools. Besides, there is of late a distinct

inclination on the part of mental nurses, who have qualified as such, to complete their education in general medical and surgical work. Unfortunately, this latter development is practically closed to attendants, so that private nursing alone offers a career in their profession apart from asylum service.

There is, however, at least one hospital where male nurses can be trained, although in restricted medical experience. I refer to the National Hospital for the Paralysed and Epileptic in Queen Square, London. This is an important exception from my point of view. It is no new departure, but has stood the test of time for many years; it is similar to an asylum in requiring male nurses in the interest of the patients.

I have been favoured with a letter from Miss Vernet, the Matron of the National Hospital, in which she says that the results of training male probationers have been most satisfactory. "I find," says Miss Vernet, "that a man, after a year's experience here, is equal in capability to many female nurses of two years' training. They work in the epileptic men's ward and in the contributing men's ward under a female sister, who trains and directs them. They also carry out massage and electrical treatment, and all catheter work in the other male wards which are staffed by female nurses. They also assist in bathing the men, and help in very heavy lifting. They also attend surgical operations, and may assist in any dressings. The two seniors are termed staff nurses, and are in charge when the sister is off duty. I have found them quite competent in these duties. . . . I have tried to keep them for a third year, but they do so well in private work that they prefer the extra pay. One is now in charge of the treatment at the King's Hospital, Osborne House. . . . I have myself worked with male nurses here, and find them most helpful, and their care as regards cleanliness of patients, etc., is quite equal to that of women nurses."

It seems to me that Miss Vernet's testimony is most valuable in this discussion; and, of course, it is just what many of us are fortunate in being able to endorse thoroughly. It does not rate the neat-handed Phyllis very highly. A considerable time ago I was led to believe that it was the rough men who played havoc with the crockery in the dining halls; but it occurred to me to have a record kept of these domestic events. The result has been a thorough vindication of the despised sex. In 1903, for instance, the breakages in the male mess-room, where neither patients nor women intervene, were represented by a modest total of 20, whereas, on the other side, neat-handed Phyllis was responsible for 127. I present this for the consideration of students of normal psychology, and can support it by the returns for seven full years. So much for tender handling.

Looking back across the years I would be most ungrateful to forget the attendants with whom I have served, to withhold a high appreciation of their services to sick patients of all classes, and in circumstances of grave responsibility and difficulty. It is distinctly galling to me to find that the work of so many faithful, and skilful, and competent men should be so lightly esteemed, and that proposals to replace them by women should be so pressed upon us, on what would seem to be inadequate grounds. At least, it has not been my misfortune to have been associated with male nurses generally and manifestly inferior to women in their work. I set aside as futile such arguments as have been presented as to the comparative ease with which male patients are fed by female nurses. The converse is quite as relevant, but it has not yet been suggested to replace nurses on the female side by male attendants.

It is no more than just to hold that male attendants are as much entitled to the best possible training as female nurses. If we are to induce the best men to engage in the work we must advance them in their noble profession by every legitimate means, and not reduce them to the position of hired bullies or common labourers. That is what it really means, if attendants are not to be entrusted with the care of the sick and acute cases, but are to be relegated to inferior positions—"to do the heavy lifting"—with no hope of advancement in the asylum, and no prospect of developing in their profession in the world of medicine. That is what I found years ago in the Hospital Commune at Copenhagen. The female nurses held the field, and called in the men when occasion for more strength appeared necessary. I cannot adopt that system in Murray's Asylum; to my mind it is no more desirable than the bad old plan of coercing female patients by the aid of male attendants,

which stood condemned long before I had anything to do with asylums, but was not quite unknown in Scotland, at least, within living memory.

Thirty years ago there were female attendants in certain male wards of the West Riding Asylum, and I have no doubt that Mr. Mould's similar arrangement at Cheadle could be traced as far back. That was a different system, it was restricted in scope, and did no wrong to the male attendants. My point is that these later proposals do constitute a wrong. I shall put it as a personal appeal. Would any of us physicians be willing to enter the service knowing that the higher posts would be absolutely unattainable, that training would be defective, that the future would be a dead level of monotony in the institution, and a limited sphere of usefulness outside? Or, would any of us, having a male case requiring care and treatment in private, send for male nurses from an asylum where the attendants are systematically excluded from the hospital section? Or, would we prefer to employ those whose knowledge and skill have been developed in a training school which knows no such unwholesome restrictions? Shall we wrong the patient or the attendant? Personally, I am in no way dubious about the answer.

I can suppose that the lesser expense of female nursing may have a certain advantage in permitting a larger staff, and that individualising of patients which we so earnestly desire. But motives of economy are repudiated, and I have not yet heard that the male medical superintendent proposes to vacate his position in favour of any lady, however competent, or however likely to induce the abstinent male patient to resume his daily bread—and butter.

My attention was specially attracted to a notable letter in *The Hospital* of June 4th last. It was written by Mr. George Bloomfield, a male nurse trained at the National Hospital. It referred to registration for male nurses, and registration is at least as important for men as for women—what is sauce for the goose is even yet sauce for the gander. Mr. Bloomfield's letter appeared to me to be so pertinent to this discussion that I got into communication with him by the courtesy of the editor of *The Hospital*. He prepared a statement which was to have been submitted to the annual meeting, but circumstances prevented it from being made personally, and I therefore now transcribe it for consideration.

MR. BLOOMFIELD'S STATEMENT.

"I have been asked by Dr. Urquhart to make a few remarks concerning this so-called reform in asylum nursing, and I desire to point out some of its disadvantages.

"I am a hospital trained nurse and speak from a nursing point of view. I maintain that it would be a great mistake to employ women nurses in the male wards of asylums. A medical superintendent has stated in *The Hospital* that "The work was found to be too revolting and laborious for any but most exceptionally constituted females." I would say that it is highly improper and degrading for women to be in wards where indecent patients are, as they have been known to throw off their clothing and masturbate, no matter who is present.

"Just imagine how extremely distressing it must have been for a certain female nurse, who was on night duty in an infirmary ward chiefly containing old men, except those likely to be troublesome, when a man jumped out of bed, took off his shirt, and masturbated in her presence. Such patients are by no means uncommon in asylums, and *surely* they ought to be nursed by their own sex. I should think that the very sight of a female nurse would tend to arouse passion.

"And again, how can a female nurse properly deal with a patient who repeatedly voids his excreta wherever he may be? or, is it suitable for a woman to nurse venereal diseases?

"If women are to supplant men in asylums there will always be the risk of a catastrophe, such as happened in a certain provincial hospital many years ago, where a male patient became violently insane during the night, seized the poker, and attacked two children savagely, with fatal results. There was a female nurse on duty, who, of course, could not stop him, and nobody would expect a woman to face a madman with a poker.

"I quite agree that patients with diseased minds should have the best possible nursing, and that reform is needed, but male attendants in asylums ought to be

hospital trained. They could then cope with patients physically, and at the same time nurse them efficiently and scientifically.

"It is a common idea that men do not make good nurses, but that is because very few men have had the opportunity of thorough training. My own experience is, that given equal conditions, male nurses can be trained to be quite as efficient as their female colleagues. Of course there are unsuitable men who enter on nursing, but I am convinced that if male attendants could be admitted to general hospitals for a course of nursing, the majority would be highly efficient, and could nurse any case intelligently.

"I am afraid that the bulk of public opinion is against me in this matter, but I hope that some general hospital will take the matter up, and admit men to their training schools in the near future, after the manner of the National Hospital in Queen Square.

"A brief *résumé* of the education there given to male nurses may be of interest. There are two wards set apart for male probationers, and two extra men for special work in the other wards (which are staffed by female nurses), such as catheters, massage, and electricity, and in fact any work which female nurses cannot with decency do. There is one sister for the two wards, who arranges the work and instructs the probationers; and at night there is a female superintendent who visits in all the wards, and is told everything of importance concerning the patients. The matron is in charge of the entire nursing staff, male and female, who are answerable to her for their general good conduct. Male and female nurses attend the same lectures and work for the same certificate, and at last year's examination the first, third, and fourth places were gained by male nurses. The male nurses are thoroughly instructed in the theory and practice of nursing, massage, and the application of medical electricity. They are taught, by the R.M.O., catheterisation with strict antiseptic precautions; the theory of medical electricity, and nasal feeding, also how to give a hypodermic injection, and to feed, *per rectum*. A male nurse attends every operation which takes place, and operation cases are mostly cerebral and spinal. During the last five months the male operation cases have been nursed, and the surgical dressings have been applied, most successfully by the male nurses."

Of course, Mr. Bloomfield writes in ignorance of what has been done in regard to the training of nurses in asylums, but it will be noticed that he speaks in no uncertain terms of what he does know. His modest claim for male nurses deserves the most respectful attention.

I am not at all satisfied that we are to go to the general hospitals of the country to find salvation. In fact, the organisation of nursing carried into effect by the Medico-Psychological Association ought to be a very direct incentive to the general hospitals to amend their methods. I have never pretended that any asylum, however large and varied in experience, can confer upon a nurse that medical and surgical skill which is only to be gained in an important general hospital; but, on the other hand, no general hospital can afford that training in the treatment of mental disorders which is requisite for a mental nurse. A fully trained nurse ought to be competent in every branch of medical, surgical, and obstetrical activity. That is a counsel of perfection, and nursing associations provide themselves with nurses who have specialised. But specialism without a thorough knowledge of general principles and a thorough training in general skillfulness is anathema. Our certificated nurses profess competence in theory and practice, they are commended as suitable; it is for us to see that their education is complete as far as asylum opportunities permit. It cannot be complete for men if male nurses are thus superseded, if their knowledge is limited to what the handbook says and what lectures enforce, to the exclusion of daily practical work among the sick.

I do resent a certain condescension on the part of trained hospital nurses which is made manifest from time to time, and will not admit inferiority of asylum nurses or nursing methods, although we may not give something out of bottles so frequently as other medical institutions. That is a stumbling-block which I am not concerned to remove just now, although many trip over it. I did not learn on a recent occasion that Sir William Gowers set much store on bottles. Indeed, he seemed more concerned to find a respectable caretaker than an experienced,

trained, and effective nurse. But then he began with "The Hanwell Wall," and the days of auld lang syne, while we are interpellating *le dernier cri*.

OBITUARY.

F. A. Inderwick.

We regret to record the death of Mr. F. A. Inderwick, K.C., which occurred at Edinburgh in August. Mr. Inderwick had only joined the Lunacy Commission in 1903, but even in his short period of service he had earned golden opinions from all who had come in contact with him. His long legal experience made him at once a valuable addition to the strength of the Commission, while his charm of manner, many-sided interests, and unflinching tact insured his success in his official relations.

Mr. Inderwick, in addition to his distinguished position as a barrister, had represented the Borough of Rye in the House of Commons, and was also a keen antiquarian.

SIR FREDERIC BATEMAN.

This distinguished physician died at his house at Norwich on the 10th of August of a stroke of paralysis. He came of an old Norfolk family, one of whose members was Cardinal Bateman, well known in the history of the fifteenth century. Frederic Bateman was born in 1824. He was the son of Mr. John Bateman, who was sheriff of Norwich in 1836. He pursued his medical studies at University College, London, and at Paris, where he got the qualification of *Officier de Santé* in 1846. He used to tell that in 1848 he was pressed to fight at a barricade; not being interested in the quarrel, he took the first opportunity to leave.

In 1849 he became a member of the Royal College of Surgeons, and in 1866 took the degree of M.D. at Aberdeen, and was elected Fellow of the Royal College of Physicians of London in 1876. He married the only daughter of Mr. John Gooderson, of Heigham Fields House, Norwich, who brought him a considerable estate. Dr. Bateman settled in practice in his native town in the picturesque house in Upper St. Giles Street, where he lived till his death. He was for many years Physician to the Norfolk Hospital, and Consulting Physician to the Bethel Hospital for Lunatics and to the Eastern Asylum for Idiots at Colchester. His contributions to medical literature were numerous and important. He took a special interest in neurology and insanity. His principal published work was on *Aphasia and the Localisation of the Faculty of Articulate Language*. This book was based upon some remarkable cases of aphasia which he had observed and followed out. These cases induced him to doubt the correctness of the localisation of motor aphasia in the portion of the frontal convolution assigned to it by Broca, whose thesis he regarded as "not proven." The book was honoured by the Alvarenga prize from the Academy of Medicine in Paris in 1891, and he was made a Foreign Associate of the Medico-Psychological Association of France.

About this time he published a new and enlarged edition. He also wrote a book entitled *Darwinism Tested by Language*, in which he argued that the faculty of speech was peculiar to man. Another of his books was *The Idiot and his Helpers*.

Dr. Bateman was a man of highly cultivated intellect, an accomplished linguist, and well read, not only in the lore of medicine, but in general literature. He was a magistrate for Norfolk, and served as Sheriff for the city of Norwich in 1872. He received many honours from learned societies, which gratified him highly. At the same time, he was ever ready to acknowledge merit in others. In 1892 he received the honour of knighthood, and the year after the degree of LL.D. was conferred upon him by the University of Aberdeen. In 1897 he suffered the loss of his amiable wife, and some time after he was visited by a slight paralytic stroke, from which he made a good recovery. I saw him in the autumn of last year, and was pleased to see how alert and intelligent he still was. He had three sons, who

all entered the medical profession, and three daughters. Sir Frederic was conservative in his modes of thought, but took little interest in politics. He was always ready to help medical and other charities. Altogether a courteous, kindly gentleman, much beloved and justly esteemed by all who knew him.—WILLIAM W. IRELAND.

HARRY ARTHUR BENHAM.

Dr. Benham was born at Gloucester, the second son of the late Mr. William Benham, Ph.D., formerly of Camden House, St. Michael's Hill, Bristol. Educated privately, he was for a short time, 1872 to 1874, engaged in mercantile pursuits, ultimately abandoning these for a medical career in 1875. His studies were pursued first at the Bristol School of Medicine, and subsequently at the London Hospital and Aberdeen. He took the degrees of M.B., C.M. of the latter university, and the Licence of the Apothecaries Hall in 1880, proceeding to the M.D. in 1883.

Dr. Benham early turned his attention to the study of insanity, and his first appointment was that of Assistant Medical Officer at the Royal Asylum, Dundee.

In 1883 he was elected to the post of Assistant Medical Superintendent at the Bristol City and County Asylum at Fishponds, becoming Superintendent of that institution on the retirement of the late Dr. Thompson in 1890. During his superintendency the asylum was almost entirely remodelled, largely extended, and in every way brought in line with modern requirements. A member of the Medico-Psychological Association, he was a regular attendant at its meetings, and took an active part in the business of the council. In 1899 he was appointed Registrar, the duties of which office he carried out with great tact and energy till ill-health compelled him to abandon the post, together with the Lectureship on Mental Diseases which he held at the Bristol University College.

Dr. Benham was an enthusiastic Freemason, attaining to high provincial rank, a past master of his lodge, the Royal Sussex 187, a P.Z. of the Chapter, and past master of nearly all the degrees in the province of Bristol.

As stated above, his health had shown signs of breaking up for some time before his death, and in 1902 he took a prolonged holiday, from which he returned considerably improved, and was able to resume his administrative duties. Latterly, however, he became much worse, and died suddenly from heart failure while writing at his desk on September 14th, 1904.

Dr. Benham was unmarried, and at the time of his death was in the fiftieth year of his age.

His was a strong personality, and in dealing with his work and daily affairs he combined a sound common sense with a special aptitude derived from his early business training.

He was deservedly popular, and his catholic tastes and genial disposition gained him hosts of friends, among whom his loss will be deeply deplored.

His contributions to medical literature were as follows:—"Case in Asylum Practice where Seven Ribs were discovered to be Fractured after death," *Journ. Med. Sci.*, 1885; "Calculus on Foreign Body in Bladder of an Epileptic Patient," *Bristol Med. Chirurg. Journ.*, 1886; "Some Remarks on Suicides in Public Asylums," *Journ. Mental Sci.*, 1903.

Dr. Lionel A. Weatherly writes as follows:—"It was with feelings of the deepest regret and sadness that I heard the news of the death of my old friend, Harry Benham. I had been a fellow student with his deceased brother in 1870, and knew him then, but had no idea at that time that he intended to enter the medical profession. When he obtained the post of Assistant Medical Officer at the City of Bristol Asylum, I well remember how quickly Dr. Thompson recognised the valuable helper he had in Dr. Benham, and when in 1890 ill-health caused his retirement, it was clear that no candidate for the office stood any chance against our friend, who, at so early an age, has passed away from our midst. The Committee can never have regretted the choice they then made, for in Dr. Benham they had a superintendent whose common sense, powers of organisation, clinical knowledge and humane feelings eminently fitted him for the difficult work of presiding over such a large and important institution as the Asylum of the City and

County of Bristol. We shall ever feel his death, and the medical profession of the West of England has indeed lost a valued member.

"He has gone from amongst us at a comparatively early age, but the memory of a true and kind heart, of a well-balanced and common-sense mind, will long remain with all who could claim him as their friend."

A City Alderman, who has long been on the Asylum Committee and has seen much of Dr. Benham's work, writes of him as follows:—"By few will Dr. Harry Benham be more sincerely missed than the members of the Visiting Committee of that institution of which he was the able Medical Superintendent. When I first joined the Committee I was at once struck by Dr. Benham's courteous and genial manner, and during the whole time I knew him this never varied. But, speaking strictly from a committeeman's point of view, it was his administrative ability—which was of a very high order—that one most admired. It is difficult for an outsider to realise the innumerable matters, many of them of a difficult and complex nature, which have to be dealt with in an Asylum containing nine hundred patients, and a necessarily large staff of nurses, attendants, and others; but day by day Dr. Benham did deal with these matters quietly, yet firmly, always with tact and good judgment, and, so far as my experience goes, invariably with the approval of the Visiting Committee. He was devoted to his work, and the welfare of the patients was his first consideration. A man of artistic tastes, he designed the decoration of the various wards in the Asylum, which decorations were carried out by the inmates with the most satisfactory results, and it was his constant care to see that everything about the wards was as bright and cheerful as good taste could make it. He grew a large number of plants and flowers, but only that his patients might enjoy them. The Corporation of Bristol has lost a faithful and valuable officer, and it is difficult to realise the committee-room at Fishponds without Dr. Harry Benham's familiar presence."

NOTICE BY LIBRARIAN.

Presented to the Library since last Annual Meeting.

By Dr. MAUDESLEY (his own works):

"Life in Mind and Conduct." 1902.

"Pathology of Mind." 1895.

"Physiology of Mind." 1896.

"Natural Causes and Supernatural Seemings." 1897.

By Dr. THEO. B. HYSLOP:

"Mental Physiology." 1895.

By Dr. SAVAGE:

"Studien über Klinik und Pathologie der Idiotie." 1895. Dr. Carl Hammerberg.

NOTICES BY THE REGISTRAR.

The next examination for the Certificate of Proficiency in Nursing will be held on Monday, November 7th, 1904.

NOTICES OF MEETINGS.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

General Meeting.—November 17th, 1904.

South-Eastern Division.—October 6th, 1904, and April 27th, 1905.

Northern and Midland Division.—October 13th, 1904, and May 4th, 1905.

South-Western Division.—October 28th, 1904, and April 11th, 1905.

Scottish Division.—November 4th, 1904, and March 10th, 1905.

Irish Division.—November 4th, 1904, May 9th, 1905, and July 5th, 1905.

APPOINTMENTS.

Cumpston, T. H. L., M.B., B.S., Resident Medical Officer, Parkside Lunatic Asylum, South Australia.

Gibb, James A., M.B., Ch.B.Aberd., Assistant Medical Officer to the Dorset County Asylum.

Hay, Joseph F. S., M.B., C.M.Aberd., Inspector of Lunatic Asylums, Hospitals and Licensed Houses in the Colony of New Zealand.

Lawson, W. W. J., M.B., Ch.B.Aberd., Second Assistant Medical Officer to the Berkshire County Asylum, Wallingford.

Pringle, A. D., M.B., Ch.B.Aberd., Assistant Resident Physician to the Natal Government Asylum, Pietermaritzburg.

Rotherham, A., M.B., B.C.Camb., Medical Superintendent of Darenth Asylum.

Williams, D. J., M.R.C.S.Eng., L.R.C.P.Lond., Medical Superintendent of the Lunatic Asylum, Jamaica, *vice* Dr. J. W. Plaxton.

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